

Supporting Material for the Article:
Succinct Amyloid and Non-Amyloid Patterns in
Hexapeptides

László Keresztes^{a,**}, Evelin Szögi^{a,**}, Bálint Varga^a, Viktor Farkas^c, András Perczel^{c,d}, Vince Grolmusz^{a,b,*}

^aPIT Bioinformatics Group, Eötvös University, H-1117 Budapest, Hungary

^bUratim Ltd., H-1118 Budapest, Hungary

^cMTA-ELTE Protein Modeling Research Group, H-1117 Budapest, Hungary

^dLaboratory of Structural Chemistry and Biology, Eötvös University, H-1117, Budapest, Hungary

Table S1: Amyloid patterns in hexapeptides

In the table we list all the existing minimal patterns of amyloid-forming hexapeptides, computed from the SVM model of the Budapest Amyloid Predictor. Each pattern in the Table contains two free “x” positions, where any amino acids can be substituted, and the resulting hexapeptide is predicted to be amyloidogenic. Since the two free positions can be substituted $20 \times 20 = 400$ ways, each of the 5531 patterns in the Table describes 400 hexapeptides succinctly.

0	1	2	3	4	5	6	7	8	9
VIVVxx	VIIIfxx	VIIILxx	VIIIfxx	VIIICxx	VIIWxx	VIIYxx	VIIIMxx	VIIIAxx	VIVVxx
VIVIxx	VIVLxx	VIVFxx	VIVCxx	VIVWxx	VIVYxx	VIFVxx	VIFIxx	VICVxx	VICIxx
VILVxx	VILIxx	VIMVxx	VFIIXxx	VFIIXxx	VFILxx	VFIFxx	VFICxx	VFIWxx	VFIYxx
VFIMxx	VFVVxx	VFVIXxx	VFVLxx	VFVFxx	VFVCxx	VFFVxx	VFFIx	VFCVxx	VFLVxx
VYIVxx	VYIIxx	VYILxx	VYIFxx	VYICxx	VYIWxx	VYIYxx	VYIMxx	VYVVxx	VYVIxx
VYVLxx	VYVFxx	VYVCxx	VYFVxx	VYFIxx	VYCVxx	VYLVxx	VVIVxx	VVIIxx	VVILxx
VVIFxx	VVICxx	VVIWxx	VVIYxx	VVVVxx	VVVIxx	VVVLxx	VVVFxx	VVFVxx	VVCVxx
VVLVxx	VWIVxx	VWIIxx	VWILxx	VWIFxx	VWICxx	VWIWxx	VWIYxx	VWWVxx	VWIXxx
VWVLxx	VLIVxx	VLIIxx	VLILxx	VLIFxx	VLICxx	VLVVxx	VLVIxx	VLVLxx	VCIVxx
VCIIxx	VCILxx	VCVVxx	VCVIXxx	VCVLxx	VMIVxx	VMIIxx	VMILxx	VMVVxx	VMVIxx
VHIVxx	VHIIxx	VHILxx	VHVWxx	VHVIxx	VQIVxx	VQIIxx	VQVVxx	VAIIVxx	VAIIXxx
VTIVxx	VTIIxx	VNIVxx	VSIIVxx	VGIVxx	IIIIVxx	IIIIxx	IIILxx	IIIFxx	IIICxx
IIIWxx	IIIIYxx	IIIMxx	IIIAxx	IIIVVxx	IIIVIx	IIVLxx	IIIVFxx	IIIVCxx	IIIVWxx
IIIVYxx	IIIFVxx	IIIFIxx	IIICVxx	IIICIx	IIILVxx	IIILIx	IIIMVxx	IFIIVxx	IFIIXxx
IFILxx	IFIFxx	IFICxx	IFIWxx	IFIYxx	IFIMxx	IFVVxx	IFVIxx	IFVLxx	IFVFxx
IFFVxx	IFCVxx	IFLVxx	IYIVxx	IYIIxx	IYILxx	IYIPxx	IYICxx	IYIWxx	IYIYxx
IYIMxx	IYVVxx	IYVIxx	IYVLxx	IYVFxx	IYFVxx	IYCVxx	IYLVxx	IIVVxx	IIVIxx
IYILxx	IYIFxx	IYICxx	IYIWxx	IYIYxx	IYVVxx	IYVIxx	IYVLxx	IYFVxx	IYCVxx
IWIVxx	IWIIxx	IWILxx	IWIFxx	IWICxx	IWVVxx	IWVIxx	IWVLxx	ILIVxx	ILIIxx
ILILxx	ILIFxx	ILVVxx	ILVIxx	ILVLxx	ICIVxx	ICIIxx	ICILxx	ICVVxx	ICVIxx
IMIVxx	IMIIxx	IMILxx	IMVVxx	IHIIXxx	IHIIXxx	IHILxx	IHVWxx	IQIVxx	IQIIxx
IQVVxx	IAIVxx	ITIVxx	INIVxx	ISIVxx	CIIIVxx	CIIIxx	CIILxx	CIIFxx	CIICxx

*Corresponding author

**Joint first authors

CIIWxx	CIIYxx	CIIMxx	CIVVxx	CIVIx	CIVLxx	CIVFxx	CIVCxx	CIFVxx	CIFIxx
CICVxx	CILVxx	CFIVxx	CFIIXx	CFILxx	CFIFxx	CFICxx	CFIWxx	CFIYxx	CFVVxx
CFVIxx	CFVLxx	CFVVxx	CYIVxx	CYIIxx	CYILxx	CYIFxx	CYICxx	CYIWxx	CYIYxx
CYVVxx	CYVIxx	CYVLxx	CYFVxx	CVIVxx	CVIIxx	CVILxx	CVIFxx	CVICxx	CVVVxx
CVVIxx	CVVLxx	CWIVxx	CWIIxx	CWLxx	CWWVxx	CWVIxx	CLIVxx	CLIIxx	CLILxx
CLVVxx	CLVIxx	CCIVxx	CCIIXx	CCILxx	CCVWxx	CCVIxx	CMIVxx	CMIIxx	CMVWxx
CHIVxx	CHIIxx	CHVVxx	CQIVxx	CAIVxx	CTIVxx	LIIIVxx	LIIIxx	LILxx	LIIIFxx
LIICxx	LIIWxx	LIIYxx	LIIIXx	LIVVxx	LIVIx	LIVLxx	LIVFxx	LIVVxx	LICVxx
LILVxx	LFIIVxx	LFIIxx	LFILxx	LFIFxx	LFICxx	LFIWxx	LFIYxx	LFVVxx	LFVIxx
LFVLxx	LFFFxx	LYIVxx	LYIIxx	LYILxx	LYIFxx	LYICxx	LYIWxx	LYIYxx	LYVVxx
LYVIxx	LYVLxx	LYFVxx	LVIVxx	LVIIxx	LVILxx	LVIFxx	LVICxx	LVIVxx	LVVIxx
LVVLxx	LWIVxx	LWIIxx	LWLxx	LWVWxx	LWVIxx	LLIVxx	LLIIxx	LLILxx	LLVVxx
LLVIxx	LCIVxx	LCIIxx	LCILxx	LCVWxx	LCVIxx	LMIVxx	LMIIxx	LMVVxx	LHIVxx
LHIIxx	LHVWxx	LQIVxx	LAIVxx	LTIVxx	FIIIVxx	FIIIxx	FIIILxx	FIIIFxx	FIIICxx
FIIWxx	FIIYxx	FIVVxx	FIVIx	FIVLxx	FIFVxx	FFIVxx	FFIIxx	FFILxx	FFIFxx
FFVVxx	FFVIxx	FFVLxx	FYIVxx	FYIIxx	FYILxx	FYIPxx	FYVWxx	FYVIxx	FYVLxx
FVIVxx	FVIIxx	FVILxx	FVWVxx	FVVIxx	FWIVxx	FWIIxx	FWILxx	FWVVxx	FWVIxx
FLIVxx	FLIIxx	FLILxx	FLVWxx	FLVlx	FCIVxx	FCIIxx	FCWVxx	FMIIVxx	FHIVxx
MIIVxx	MIIIxx	MIIIXx	MIIIFxx	MIVVxx	MIVIx	MIVLxx	MFIVxx	MFIIXx	MFILxx
MFVVxx	MFIVxx	MYIVxx	MYIIxx	MYILxx	MYVVxx	MYVlx	MVIVxx	MVIIxx	MVILxx
MVVVxx	MVVIxx	MWIVxx	MWIIxx	MWVWxx	MLIVxx	MLIIxx	MLVVxx	MCIIVxx	MCIIXx
MMIVxx	MHIVxx	WIIVxx	WIIIxx	WIIIXx	WIIIFxx	WIVVxx	WIVIx	WIVLxx	WFIVxx
WFIIxx	WFILxx	WFVVxx	WFIVxx	WYIVxx	WYIIxx	WYILxx	WYVVxx	WYVIxx	WIVVxx
WVIIxx	WVILxx	WVWVxx	WVVIxx	WWIVxx	WWIVxx	WLIVxx	WLIIxx	WLIVxx	WLVVxx
WCIVxx	WCIIxx	WMIVxx	WHIVxx	GIIIVxx	GIIIXx	GIIILxx	GIVVxx	GIVIx	GFIIVxx
GFIIxx	GFVVxx	GYIVxx	GYIIxx	GYVVxx	GIVVxx	GVIIxx	GWIVxx	GLIVxx	YIIIVxx
YIIIXx	YIILxx	YIVVxx	YIVIx	YFIVxx	YFTIx	YFVVxx	YYIVxx	YYIIxx	YYVVxx
YVIIVxx	YVIIxx	YWIIVxx	YLIVxx	AIIIXx	AIIIVxx	AIVVxx	AFTIVxx	AFTIIxx	AYIVxx
AYIIXx	AVIVxx	HIVVxx	TIIIVxx	VIIIXx	VIIIXWx	VIIIXF	VIIIXCx	VIIIXY	VIIIXMx
VIIIXv	VIIIXLx	VIVIx	VIVWx	VIVVxx	VIVxFx	VIVxCx	VIVxYx	VIVxMx	VIVxVx
VFIIXx	VFIIXF	VFIIXy	VFIIXy	VFIIXM	VFIIXF	VFIIXLx	VFIIXy	VFIIXw	VFIIXF
VYIXIx	VYIXWx	VYIXFx	VYIXCx	VYIXYx	VYIXMx	VYIXx	VYIXLx	VYVxIx	VYVxWx
VYVxFx	VVIXIx	VVIXWx	VVIXFx	VVIXCx	VVIXYx	VVIXMx	VVIXx	VVIXv	VVWxWx
VWIIXx	VWIIXWx	VWIIXF	VWVWxx	VLIIXx	VLIIXWx	VLIIXF	VLVxIx	VCIIXx	VCIxWx
VCVxIx	VMIIXx	VHIXWx	IIIIXx	IIIIXWx	IIIIXF	IIIIXCx	IIIIXy	IIIIXMx	IIIIXVx
IIIIXLx	IIIVxIx	IIIVWx	IIIVFx	IIIVxCx	IIIVxYx	IFIIXx	IFIIXw	IFIIXF	IFIIXCx
IFIIXy	IFIIXMx	IFIIXv	IFIIXWx	IFIIXF	IFIIXy	IFIIXLx	IFIIXy	IFIIXw	IFIIXCx
IYIXYx	IYIXMx	IYIXVx	IYVWxx	IYVxFx	IYVxMx	IYVxI	IYVxLx	IYVxVx	IYVxWx
IVIXYx	IVVWxx	IVWxW	IVWxI	IVWxK	IVWxFx	IVWxI	ILIXIx	ILIXw	ILIXF
ILVxIx	ICIXIx	ICIXWx	IMIXIx	IHIIXx	CIIIXx	CIIIXWx	CIIIXF	CIIIXy	CIIIXy
CIIIXMx	CIIIXVx	CIVVxIx	CIVWx	CIVxFx	CPIIXx	CFIXWx	CFIXF	CFIXCx	CFIXYx
CFVxIx	CFVWxx	CYIXIx	CYIXWx	CYIXFx	CYIXCx	CYIXYx	CYVWxx	CYVxIx	CVIXIx
CVIXWx	CVIXFx	CVIXIx	CVIXWx	CVIXF	CVIXCx	CVIXy	CVIXLx	CVIXIx	CVIXWx
LIIIXF	LIIIXCx	LIIIXy	LIIIXMx	LIIIXVx	LIVVxx	LIVVxWx	LIVVxF	LFIIXx	LIIIXWx
LFIIXx	LFIIXC	LFIIXy	LFIIXMx	LFIIXVx	LYIXWx	LYIXF	LYIXCx	LYIXVx	LVIIXWx
LVIIXF	LVVxIx	LWIXIx	LLIXIx	LCIIXx	FIIIXx	FIIIXWx	FIIIXF	FIIIXCx	FIIIXYx
FIVxIx	FIVWxx	FFIXIx	FFIXWx	FFIXF	FFVxFx	FYIVIx	FYIVxWx	FYIVxF	FYVWxx
FVIXIx	FVIXWx	FVIXxI	FVIXMx	FVIXVx	MIIIXx	MIIIXWx	MIVVxx	MFIIXx	MYIXIx
MVIXIx	WIIIXx	WIIIXWx	WIIIXF	WIVVxx	WFIXIx	WYIVxx	WIVIxWx	GIIIXx	YIIIXx
VIIIXV	VIIIXC	VIIIXI	VIIIXF	VIVVxx	VFIIXV	VFIIXC	VFVWxx	VYIIXV	VYIIXC
VYVXXV	VVIIxV	VWIIxV	VLIIXV	IIIIXV	IIIIXC	IIIIXI	IIIVxxV	IFIIXV	IFIIXC
IYIIXV	IYIIXC	IYIVVxx	IWIIxV	ILIIXV	ILIIXC	CIIIXV	CIVVxxV	CFIIXV	CYIIXV
CVIIXV	LIIIXV	LIIIXC	LIIIXWx	LYIIXV	LYIIXWx	LYIIXF	FIIIXV	VIIIXV	VIIIXC
VxIVWx	VxIVFx	VxIVCx	VxIVYx	VxIVMx	VxIVVx	VxIVLx	VxIVGx	VxIVHx	VxIVTx
VxIVPx	VxIVAx	VxIVNx	VxIVQx	VxIVSx	VxIVRx	VxIIIX	VxIIWx	VxIIIFx	VxIICx
VxIIYx	VxIIMx	VxIIVx	VxIILx	VxIIGx	VxIIHx	VxIIITx	VxIIPx	VxIIAx	VxIINx
VxIIQx	VxILIx	VxILWx	VxILFx	VxILCx	VxILYx	VxILMx	VxILVx	VxILLx	VxILGx
VxILHx	VxILTx	VxILPx	VxIFIx	VxIFWx	VxIFFx	VxIFCx	VxIFYx	VxIFMx	VxIFVx
VxIFLx	VxIFGx	VxIFHx	VxICIx	VxICWx	VxICFx	VxICCx	VxICYx	VxICMx	VxICVx
VxICLx	VxICGx	VxICIx	VxIWIx	VxIWWx	VxIWFx	VxIWCx	VxIWyx	VxIWMx	VxIWVx
VxIWGx	VxIYIx	VxIYWx	VxIYFx	VxIYCx	VxIYYx	VxIYMx	VxIYVx	VxIYLx	VxIYGx
VxIMIx	VxIMWx	VxIMFx	VxIMCx	VxIMYx	VxIMMx	VxIMVx	VxIMLx	VxIAIx	VxIAWx
VxIAFx	VxIACx	VxIAYx	VxIAMx	VxIAVx	VxIALx	VxITIx	VxITWx	VxITFx	VxINIx
VxINWx	VxIHx	VxIEIx	VxISIx	VxVVIx	VxVWx	VxVVFx	VxVVCx	VxVYYx	VxVVMx
VxVVWx	VxVVLx	VxVVGx	VxVWh	VxVVTx	VxVPx	VxVVAx	VxVWNx	VxVIIx	VxVIWx
VxVIFx	VxVICx	VxVIYx	VxVIMx	VxVIVx	VxVILx	VxVIGx	VxVIHx	VxVITx	VxVLIx
VxVLWx	VxVLFx	VxVLCx	VxVLYx	VxVLMx	VxVLVx	VxVLLx	VxVLGx	VxVLHx	VxVFIx
VxVFWx	VxVFFx	VxVFCx	VxVFYx	VxVFMx	VxVFX	VxVFLx	VxVCIx	VxVCWx	VxVCFx

VxVCCx	VxVCYx	VxVCMx	VxVCVx	VxVCLx	VxVWIx	VxVWWx	VxVWFx	VxVWCx	VxVWYx
VxVWMx	VxVWVx	VxVWLx	VxVVIx	VxVWx	VxVYFx	VxVVCx	VxVYYx	VxVVMx	VxVYVx
VxVYLx	VxVMIx	VxVMWx	VxVMFx	VxVMCx	VxVMYx	VxVMMx	VxVMVx	VxVMLx	VxVAIx
VxVAWx	VxVAFx	VxVACx	VxVAYx	VxVTIx	VxFVIx	VxFVWx	VxFVFx	VxFVCx	VxFVYx
VxFVMx	VxFVVx	VxFVLx	VxFVGx	VxFIIx	VxFIWx	VxFIFx	VxFICx	VxFIYx	VxFIMx
VxFIVx	VxFILx	VxFLIx	VxFLWx	VxFLFx	VxFLCx	VxFLYx	VxFLMx	VxFLVx	VxFFIx
VxFFWx	VxFFFx	VxFCIx	VxFCWx	VxFWIx	VxFWWx	VxFYIx	VxFYWx	VxFMIX	VxCVlx
VxCVWx	VxCVFx	VxCVCx	VxCVYx	VxCVMx	VxCVWx	VxCVLx	VxCVGx	VxCIIx	VxCIWx
VxCIFx	VxCICx	VxCIYx	VxCIMx	VxCIVx	VxCILx	VxCLlx	VxCLFx	VxCLCx	
VxCLYx	VxCLMx	VxCLVx	VxCFIx	VxCFWx	VxCCIx	VxCCWx	VxCWIx	VxCYIx	VxLVIx
VxLWVx	VxLWFx	VxLVCx	VxLVYx	VxLVMx	VxLWVx	VxLVLx	VxLIIx	VxLIIWx	VxLIFx
VxLICx	VxLIYx	VxLIMx	VxLIVx	VxLLIx	VxLLWx	VxLLFx	VxLLCx	VxLLYx	
VxLFIx	VxLFWx	VxLCIx	VxLWIx	VxLYIx	VxMVIx	VxMWx	VxMFVx	VxMVCx	VxMVYx
VxMVMx	VxMVWx	VxMLVx	VxMIIx	VxMTIx	VxMIFx	VxMICx	VxMIYx	VxMMIx	VxMIVx
VxMLIx	VxMLWx	VxMLFx	VxMFIx	VxWVlx	VxWVFX	VxWVCx	VxWVYx	VxWIWx	
VxWIWx	VxWLIx	VxYVlx	VxWVWx	VxYVFX	VxYIIx	IxIVIx	IxIVWx	IxIVFx	IxIVCx
IxIVYx	IxIVMx	IxIVVx	IxIVLx	IxIVGx	IxIVHx	IxIVTx	IxIVPx	IxIVAx	IxIVNx
IxIVQx	IxIVSx	IxIIIx	IxIIWx	IxIIFx	IxIICx	IxIIYx	IxIIMx	IxIIIVx	IxIILx
IxIIGx	IxIIHx	IxIITx	IxIIPx	IxIIAx	IxIINx	IxIILx	IxIILWx	IxIILFx	IxILCx
IxILYx	IxILMx	IxILVx	IxILLx	IxILGx	IxILHx	IxILTx	IxIFIx	IxIFWx	IxFIFx
IxFICx	IxFYIx	IxFIMx	IxFIVx	IxFIFLx	IxFIGx	IxFICx	IxFICWx	IxFICFx	IxFCCx
IxICYx	IxICMx	IxICVx	IxICLx	IxICGx	IxIWlx	IxIWwx	IxIWfx	IxIWCx	IxIWYx
IxIWMx	IxIWVx	IxIWLx	IxIWGx	IxIYIx	IxIYVx	IxIYFx	IxIYCx	IxIYyx	IxIYMx
IxIVYx	IxIVLx	IxIVGx	IxIMIx	IxIMWx	IxIMFx	IxIMCx	IxIMYx	IxIMMx	IxIMVx
IxIMLx	IxIAIx	IxIAWx	IxIAFx	IxIACx	IxIAYx	IxIAMx	IxIAVx	IxIALx	IxITIx
IxITWx	IxITFx	IxINIx	IxIHlx	IxIEIx	IxISIx	IxVVIx	IxVWwx	IxVVFx	IxVVCx
IxVVYx	IxVVMx	IxVWVx	IxVVLx	IxVVGx	IxVWlx	IxVVTx	IxVVPx	IxVVAx	IxVIIx
IxVIWx	IxVIFx	IxVICx	IxVIYx	IxVIMx	IxVIVx	IxVILx	IxVIGx	IxVIHx	IxVITx
IxVLIx	IxVWLx	IxVLFx	IxVLCx	IxVLYx	IxVLMx	IxVLLx	IxVLGx	IxVlhx	
IxVFIx	IxVFWx	IxVFFx	IxVFCx	IxVFYx	IxVFMx	IxVFX	IxVFLx	IxVCIx	IxVCWx
IxVCFx	IxVCCx	IxVCYx	IxVCMx	IxVCVx	IxVCLx	IxVWIx	IxVWWx	IxVWFx	IxVWCx
IxVWYx	IxVWMx	IxVWVx	IxVWLx	IxVYIx	IxVWlx	IxVYVx	IxVYFx	IxVYCx	IxVYMy
IxVYVx	IxVYLx	IxVMIx	IxVMMx	IxVMPx	IxVMCx	IxVMYx	IxVMMx	IxVVMx	IxVAIx
IxVAWx	IxVAFx	IxVTIx	IxFVIx	IxFWVx	IxFVFx	IxFVCx	IxFVYx	IxFVMx	IxFVWx
IxFVLx	IxFVfx	IxFIIx	IxFIrx	IxFIFx	IxFICx	IxFIYx	IxFIMx	IxFIILx	
IxFLlx	IxFLWx	IxFLlx	IxFLCx	IxFLYx	IxFLMx	IxFLVx	IxFFIx	IxFFWx	IxFClx
IxFCWx	IxFWIx	IxFYIx	IxFPMx	IxFVlx	IxFWlx	IxFVfx	IxFVcx	IxFCVy	IxFCMx
IxCVVx	IxCVLx	IxCIIx	IxCIWx	IxCIFx	IxCICx	IxCIYx	IxCIMx	IxCIVx	IxCILx
IxCLlx	IxCLWx	IxCLFx	IxCLCx	IxCLYx	IxCFIx	IxCFWx	IxCCIx	IxCWIx	IxCYIx
IxLVIx	IxLWVx	IxLVFx	IxLVCx	IxLYVx	IxLVMx	IxLWVx	IxLILx	IxLIIWx	
IxLIFx	IxLICx	IxLIYx	IxLIMx	IxLIVx	IxLILx	IxLIIx	IxLILWx	IxLILFx	IxLLCx
IxLFIx	IxLCIx	IxLWIx	IxLYIx	IxMVlx	IxMVWx	IxMVFx	IxMVCx	IxMVYx	IxMVMx
IxMVVx	IxMVLx	IxMIIx	IxMIWx	IxMIFx	IxMICx	IxMIYx	IxMLIx	IxMLWx	IxWVlx
IxWVWx	IxWFWx	IxWIIx	IxWIVx	IxWVlx	IxWVYx	IxWVlx	CxIVIx	CxIVWx	CxIVFx
CxIVCx	CxIVYx	CxIVMx	CxIVVx	CxIVLx	CxIVGx	CxIVHx	CxIVTx	CxIVPx	CxIVAx
CxIVNx	CxIVQx	CxIVSx	CxIIIx	CxIIWx	CxIIFx	CxIICx	CxIIYx	CxIIMx	CxIIVx
CxIILx	CxIIGx	CxIIHx	CxIITx	CxIIPx	CxIIAx	CxIILx	CxILWx	CxILFx	CxILCx
CxILYx	CxILMx	CxILLx	CxILGx	CxIFlx	CxIFlx	CxIFWx	CxIFCx	CxIFYx	
CxIFYx	CxIFMx	CxIFVx	CxIFlx	CxIPGx	CxIClx	CxICWx	CxICFx	CxICCx	CxICYx
CxICMx	CxICVx	CxIClx	CxICGx	CxIWlx	CxIWWx	CxIWfx	CxIWcx	CxIWYx	CxIWmx
CxIWVx	CxIWLx	CxIYIx	CxIYVx	CxIYFx	CxIYCx	CxIYxx	CxIYCx	CxIYVx	CxIYLx
CxIMIx	CxIMWx	CxIMFx	CxIMCx	CxIMYx	CxIMMx	CxIMVx	CxIMLx	CxIAIx	CxIAWx
CxIAFx	CxIACx	CxIAYx	CxIAMx	CxIAVx	CxITIx	CxINlx	CxVVIx	CxVWVx	CxVVFx
CxVVCx	CxVYVx	CxVVMx	CxVWVx	CxVVLx	CxVVGx	CxVWlx	CxVVTx	CxVVPx	CxVIIx
CxVIWx	CxVIFx	CxVICx	CxVIYx	CxVIMx	CxVIVx	CxVILx	CxVIGx	CxVIHx	CxVLIx
CxVLWx	CxVLFx	CxVLCx	CxVLYx	CxVLMx	CxVlx	CxVLLx	CxVLGx	CxVFIx	CxVFWx
CxVFFx	CxVFCx	CxVFX	CxVFMx	CxVFX	CxVFLx	CxVCIx	CxVCWx	CxVCFx	CxVCCx
CxVCYx	CxVCMx	CxVCVx	CxVCLx	CxVWlx	CxVWVx	CxVWlx	CxVWFx	CxVWCx	CxVWMx
CxVWVx	CxVWLx	CxVVIx	CxVWYx	CxVFX	CxVYCx	CxVYxx	CxVYCx	CxVYVx	CxVMIx
CxVMWx	CxVMFx	CxVMCx	CxVMYx	CxVAIx	CxVAWx	CxVAFx	CxFVIx	CxFVWx	CxFVfx
CxFVCx	CxFVYx	CxFVMx	CxFVlx	CxFVlx	CxFIIx	CxFIw	CxFIFx	CxFICx	CxFIYx
CxFIMx	CxFIVx	CxFILx	CxFLIx	CxFFLx	CxFILx	CxFIYx	CxFIIx	CxFICx	CxFWIx
CxFYIx	CxFVIx	CxFWlx	CxFVfx	CxFVfx	CxFVlx	CxFVlx	CxFVlx	CxFVfx	CxFVYx
CxCIWx	CxCIFx	CxCICx	CxCYIx	CxCIMx	CxCIVx	CxCLlx	CxCLFx	CxCFICx	
CxCGIx	CxLVIx	CxLWVx	CxLVFx	CxLVCx	CxLVYx	CxLVMx	CxLVLx	CxLVLx	CxLIIx
CxLIWx	CxLIFx	CxLICx	CxLIYx	CxLIMx	CxLIVx	CxLLIx	CxLLWx	CxLLFx	CxLFIx
CxMVIx	CxMWlx	CxMVFx	CxMVCx	CxMVYx	CxMVMx	CxMVlx	CxMIIx	CxMIIw	CxMIFx
CxMLIx	CxWVIx	CxWVWx	CxWVFx	CxWIIx	CxYVIx	LxIVIx	LxIVWx	LxIVFx	LxIVCx

LxIVYx	LxIVMx	LxIVVx	LxIVLx	LxIVGx	LxIVHx	LxIVTx	LxIVPx	LxIVAx	LxIVNx
LxIVQx	LxIIIx	LxIIWx	LxIIFx	LxIICx	LxIIYx	LxIIMx	LxIIVx	LxIIILx	LxIIGx
LxIIHx	LxIITx	LxIIPx	LxIIAx	LxILIx	LxILWx	LxILFx	LxILCx	LxILYx	LxILMx
LxILVx	LxILLx	LxILGx	LxILHx	LxIFIX	LxIFWx	LxIFFx	LxIFCx	LxIFYx	LxIFMx
LxIFVx	LxIFLx	LxIFGx	LxICIx	LxICWx	LxICFx	LxICCx	LxICYx	LxICMx	LxICVx
LxICLx	LxIWIx	LxIWwx	LxIWFx	LxIWCx	LxIWYx	LxIWMx	LxIWVx	LxIWLx	LxIYIx
LxIYwx	LxIYFx	LxIYCx	LxIYYx	LxIYMx	LxIYVx	LxIYLx	LxIMIx	LxIMWx	LxIMFx
LxIMCx	LxIMYx	LxIMMx	LxIMVx	LxIMLx	LxIAIx	LxIAWx	LxIAFx	LxIACx	LxIAYx
LxIAMx	LxIAVx	LxITIx	LxINIx	LxVVlx	LxVWwx	LxVVFx	LxVVCx	LxVVYx	LxVVMx
LxVVVx	LxVVLx	LxVVGx	LxVWh	LxVWTx	LxVIIx	LxVIWx	LxVIFx	LxVICx	LxVIYx
LxVIMx	LxVIVx	LxVILx	LxVIGx	LxVLIx	LxVLLx	LxVLFx	LxVLCx	LxVLYx	
LxVLMx	LxVLVx	LxVLLx	LxVLGx	LxVFIx	LxVFWx	LxVFFx	LxVFCx	LxVFX	LxVFMx
LxVFX	LxVFLx	LxVCIx	LxVCWx	LxVCFx	LxVCCx	LxVCYx	LxVCMx	LxVCVx	LxVCLx
LxVWlx	LxVWWx	LxVWFx	LxVWcx	LxVWYx	LxVWMx	LxVWVx	LxVIIx	LxVWVx	LxVYFx
LxVYCx	LxVYYx	LxVYMx	LxVYVx	LxVmix	LxVMWx	LxVMFx	LxVMCx	LxVAIx	LxVAWx
LxFVlx	LxFVWx	LxFVFX	LxFVcx	LxFVYx	LxFVMx	LxFVYx	LxFVLx	LxFIIx	LxFIWx
LxFIFx	LxFICx	LxFIYx	LxFIMx	LxFIVx	LxFILx	LxFILx	LxFILWx	LxFILFx	LxFIXx
LxFClx	LxFWIx	LxFYIx	LxCVlx	LxCVWx	LxCVfx	LxCVCx	LxCVYx	LxCVMx	LxCVWx
LxCVlx	LxCIIx	LxCIWx	LxCIFx	LxCICx	LxCIYx	LxCIMx	LxCIvx	LxCLIx	LxCLWx
LxCLFx	LxCFIx	LxCCIx	LxLVlx	LxLVWx	LxLVFx	LxLVCx	LxLVYx	LxLVMx	LxLVWx
LxLVLx	LxLIIx	LxLIWx	LxLIFx	LxLICx	LxLIYx	LxLIMx	LxLIVx	LxLIIx	LxLLWx
LxLLFx	LxLFIx	LxMVIx	LxMVWx	LxMFVx	LxMVCx	LxMVYx	LxMVMx	LxMVWx	LxMIIx
LxMIWx	LxMIFx	LxMLIx	LxWVlx	LxWVWx	LxWIIx	LxVYIx	FxIVIx	FxIVWx	FxIVFx
FxIVCx	FxIVYx	FxIVMx	FxIVVx	FxIVLx	FxIVGx	FxIVHx	FxIVTx	FxIVPx	FxIVAx
FxIIIX	FxIIWx	FxIIIFx	FxIICx	FxIIYx	FxIIMx	FxIIVx	FxIILx	FxIIGx	FxIIHx
FxIITx	FxILLx	FxILWx	FxILFx	FxILCx	FxILYx	FxILMx	FxILVx	FxILLx	FxILGx
FxIFTx	FxIFFx	FxIFCx	FxIFYx	FxIFMx	FxIFVx	FxIFLx	FxIClx	FxICWx	
FxICFx	FxICCx	FxICYx	FxICMx	FxICVx	FxICLx	FxIWlx	FxIWwx	FxIWfx	FxIWcx
FxIWy	FxIWMx	FxIWVx	FxIWlx	FxIYIx	FxIYFx	FxIYCx	FxIYy	FxIYMx	
FxIYVx	FxIYLx	FxIMIx	FxIMWx	FxIMFx	FxIMCx	FxIMYx	FxIMMx	FxIMVx	FxAIax
FxIAWx	FxITIx	FxITVx	FxVWlx	FxVWVx	FxVWfx	FxVVCx	FxVVYx	FxVVMx	FxVVVx
FxVVLx	FxVVGx	FxVWHx	FxVIIx	FxVIWx	FxVIFx	FxVICx	FxVIIy	FxVIMx	FxVIVx
FxVILx	FxVIGx	FxVLIx	FxVLWx	FxVLFx	FxVLCx	FxVLYx	FxVLMx	FxVLUx	FxVLLx
FxVFIx	FxVFWx	FxVFFx	FxVFCx	FxVFYx	FxVFMx	FxVFX	FxVCIx	FxVCWx	FxVCFx
FxVCCx	FxVCYx	FxVCMx	FxVCVx	FxVWlx	FxVWWx	FxVWFx	FxVWCx	FxVWYx	FxVYIx
FxVYVx	FxVYFx	FxVYCx	FxVYYx	FxVMIx	FxVMWx	FxVFMx	FxVAIx	FxFVlx	FxFVWx
FxFVfx	FxFVCx	FxFVYx	FxFVMx	FxFVYx	FxFVLx	FxFIIx	FxFIIFx	FxFICx	
FxFIYx	FxFIMx	FxFIVx	FxFILx	FxFLWx	FxFLFx	FxFFIx	FxCVIx	FxCVWx	FxCVfx
FxCVCx	FxCVYx	FxCVMx	FxCVWx	FxCVlx	FxCIIx	FxCIIWx	FxCIFx	FxCICx	FxCCLx
FxCLWx	FxCLVx	FxLWVx	FxLVLx	FxLVCx	FxLVYx	FxLVMx	FxLIVlx	FxLIIx	FxLIWx
FxLIFx	FxLLIx	FxMVIx	FxMWlx	FxMVFx	FxMIIx	FxMIIWx	FxWVlx	MxIVIx	MxIVWx
MxIVFx	MxIVCx	MxIVYx	MxIVMx	MxIVVx	MxIVLx	MxIVGx	MxIVHx	MxIVTx	MxIIIx
MxIIIfx	MxIIIfx	MxIICx	MxIIYx	MxIIMx	MxIIVx	MxIILx	MxIIGx	MxIIHx	MxILIx
MxILWx	MxILFx	MxILCx	MxILYx	MxILMx	MxILVx	MxILWx	MxILGx	MxIFIx	MxIFWx
MxIFFx	MxIFCx	MxIFYx	MxIFMx	MxIFVx	MxIFLx	MxIClx	MxICWx	MxICFx	MxICCx
MxICYx	MxICMx	MxICVx	MxICLx	MxIWIx	MxIWWx	MxIWFx	MxIWCx	MxIWYx	MxIWMx
MxIWVx	MxIYIx	MxIYVx	MxIYFx	MxIYCx	MxIYYx	MxIYMX	MxIYVx	MxIMIx	MxIMWx
MxIMFx	MxIAIx	MxIAWx	MxVVIx	MxVWVx	MxVVFx	MxVVCx	MxVYVx	MxVVMx	MxVVVx
MxVVLx	MxVVGx	MxVWHx	MxVIIx	MxVIWx	MxVIFx	MxVICx	MxVIYx	MxVIMx	MxVIVx
MxVILx	MxVIGx	MxVLIx	MxVWLx	MxVLFx	MxVLCx	MxVLYx	MxVLMx	MxVLVx	MxVLLx
MxVFIx	MxVFWx	MxVFFx	MxVFCx	MxVClx	MxVCWx	MxVCFx	MxVWIx	MxVWWx	MxVWFx
MxVYIx	MxVYVx	MxVYCx	MxVYFx	MxVMIx	MxFVIx	MxFVfx	MxFVCx	MxFVYx	MxFVMx
MxFVvx	MxFFIx	MxFIWx	MxFIFx	MxFILx	MxFClx	MxFClx	MxCVlx	MxCVCx	MxCVYx
MxCIIx	MxCIIWx	MxCIFx	MxCIIx	MxLVIx	MxLWlx	MxLWFx	MxLVCx	MxLIIx	MxLIWx
MxLIIx	MxMVIx	MxMVIx	MxMIIx	MxWVlx	MxWVYx	MxWVYx	MxWVfx	MxWIVCx	MxWIVYx
WxIVMx	WxIVVx	WxIVLx	WxIVGx	WxIVHx	WxIVTx	WxIIIx	WxIIWx	WxIICx	
WxIIYx	WxIIMx	WxIIVx	WxIILx	WxIIGx	WxIIHx	WxIILx	WxIILWx	WxIILFx	WxIICx
WxIILx	WxILMx	WxILVx	WxILLx	WxILGx	WxIFIx	WxIFWx	WxIFFx	WxIFCx	WxIFYx
WxIFMx	WxIFVx	WxIFLx	WxIClx	WxICWx	WxICFx	WxICCx	WxICYx	WxICMx	WxICVx
WxICLx	WxIWIx	WxIWWx	WxIWFx	WxIWYx	WxIWYx	WxIWmx	WxIWVx	WxIYIx	WxIYWx
WxIYFx	WxIYCx	WxIYy	WxIYmx	WxIYVx	WxIMIx	WxIMWx	WxIMFx	WxIAIx	WxIAWx
WxVVIx	WxVWVx	WxVVFx	WxVVCx	WxVYVx	WxVVMx	WxVVYx	WxVWLx	WxVVGx	WxVWVx
WxVIIx	WxVIWx	WxVIFx	WxVICx	WxVIYx	WxVIMx	WxVIMx	WxVILx	WxVIGx	WxVLIx
WxVLWx	WxVLFx	WxVLCx	WxVLYx	WxVLMx	WxVLLx	WxVLFx	WxVFIx	WxVFWx	WxVFFx
WxVFCx	WxVCIx	WxVCWx	WxVCFx	WxVIIx	WxVWWx	WxVFWx	WxVYIx	WxVWVx	WxVYFx
WxVMIx	WxFVIx	WxFVWx	WxFVFx	WxFVcx	WxFVYx	WxFVMx	WxFVYx	WxFIIx	WxFIw
WxFIFx	WxFLIx	WxFClx	WxFVYx	WxFClx	WxFClx	WxFClx	WxFClx	WxFClx	WxFClx
WxCLIx	WxLVIx	WxLWVx	WxLVFx	WxLVcx	WxLIIx	WxLIIx	WxLIIx	WxLIIx	WxLIIx

WxMIIx	GxIVIx	GxIVWx	GxIVFx	GxIVCx	GxIVYx	GxIVMx	GxIVVx	GxIVLx	GxIVGx
GxIVHx	GxIIIx	GxIIWx	GxIIFx	GxIICx	GxIIYx	GxIIMx	GxIIVx	GxIILx	GxIIGx
GxILIx	GxILWx	GxILFx	GxILCx	GxILYx	GxILMx	GxILVx	GxILLx	GxIFIx	GxIFWx
GxIFFx	GxIFCx	GxIClx	GxICWx	GxICFx	GxIWlx	GxIWVx	GxIWFx	GxIYlx	GxIYWx
GxIYFx	GxIMIx	GxVVlx	GxVWlx	GxVVFx	GxVVCx	GxVVYx	GxVVMx	GxVVlx	GxVVIx
GxVIIx	GxVIWx	GxVIFx	GxVICx	GxVIYx	GxVIMx	GxVIWx	GxVILx	GxVLIx	GxVLWx
GxVLFx	GxVLCx	GxVFIx	GxVCIx	GxVWlx	GxVYIx	GxFVlx	GxFWVx	GxFVfx	GxFIIx
GxCVlx	GxCVWx	GxCIIx	GxLVlx	GxMVlx	YxIVlx	YxIVWx	YxIVFx	YxIVCx	YxIVVx
YxIVMx	YxIVVx	YxIVLx	YxIVGx	YxIVHx	YxIIIx	YxIIWx	YxIIFx	YxIICx	YxIIXx
YxIIMx	YxIIWx	YxIILx	YxIIGx	YxIILx	YxILWx	YxILFx	YxILCx	YxILYx	YxILMx
YxILVx	YxILLx	YxIFlx	YxIFWx	YxIFCx	YxIClx	YxICWx	YxICFx	YxIWlx	
YxIWWx	YxIWFx	YxIYlx	YxIYWx	YxIYFx	YxIMlx	YxVWlx	YxVWVx	YxVVCx	
YxVVYx	YxVVMx	YxVVlx	YxVVLx	YxVIIx	YxVIWx	YxVIFx	YxVICx	YxVIYx	YxVIMx
YxVIVx	YxVILx	YxVLlx	YxVLWx	YxVLFx	YxVLCx	YxVFIx	YxVCIx	YxVWlx	YxVYIx
YxFVIx	YxFWlx	YxFVlx	YxFIlx	YxCVlx	YxCIlx	YxLVIx	YxLWlx	YxMVlx	AxIVIx
AxIVWx	AxIVFx	AxIVCx	AxIVYx	AxIVMx	AxIVVx	AxIVLx	AxIVGx	AxIIIx	AxIIWx
AxIIFx	AxIICx	AxIIYx	AxIIMx	AxIIVx	AxIILx	AxILlx	AxILWx	AxILFx	AxILCx
AxIILy	AxILMx	AxILVx	AxIFIx	AxIFWx	AxIFFx	AxIClx	AxICWx	AxIWIx	AxIYIx
AxIMIx	AxVWlx	AxVWVx	AxVVFx	AxVVCx	AxVYlx	AxVVMx	AxVWlx	AxVILx	AxVIIx
AxVIWx	AxVIFx	AxVICx	AxVYlx	AxVIMx	AxIVVx	AxVLlx	AxVLWx	AxVLFx	AxVFIx
AxFVIx	AxCVlx	AxLVlx	HxIVlx	HxIVWx	HxIVFx	HxIVCx	HxIVYx	HxIVMx	HxIVVx
HxIVLx	HxIIIx	HxIIWx	HxIIFx	HxIICx	HxIIYx	HxIIMx	HxIIVx	HxIILx	HxILWx
HxILFx	HxIFIx	HxIClx	HxVWlx	HxVWVx	HxVVFx	HxVVCx	HxVYlx	HxVVMx	HxVVWx
HxVIIx	HxVIWx	HxVIFx	HxVLlx	TxIVlx	TxIVWx	TxIVFx	TxIVCx	TxIVYx	TxIVMx
TxIVVx	TxIVLx	TxIIIx	TxIIWx	TxIIIFx	TxIIICx	TxIIYx	TxIIMx	TxIIVx	TxIILx
TxILWx	TxILFx	TxIFlx	TxVWlx	TxVVFx	TxVVCx	TxVIIx	TxVIIWx	TxVLIx	
SxIVVx	SxIVFx	SxIVCx	SxIVYx	SxIVMx	SxIVVx	SxIIIfx	SxIIWx	SxIIIfx	
SxIILx	SxVVIx	SxVWlx	SxVVFx	SxVIIx	QxIVWx	QxIVFx	QxIVCx	QxIVYx	
QxIVMx	QxIVVx	QxIIIx	QxIIWx	QxIIIFx	QxILlx	QxVIIx	QxVWlx	QxVIFx	
KxIVIx	KxIVWx	KxIVFx	KxIVCx	KxIVYx	KxIVMx	KxIVVx	KxIIIfx	KxIIWx	KxIIFx
KxIIILx	KxVVIx	KxVWlx	KxVIIx	NxIVlx	NxIVWx	NxIVFx	NxIVCx	NxIVYx	NxIIIfx
NxIIWx	NxILIx	NxVVIx	NxVWlx	NxVIIx	RxIVlx	RxIVWx	RxVIIx	RxVWlx	DxIVIx
ExIVIx	VxIVVx	VxIVFx	VxIVCx	VxIVYx	VxIVxL	VxIVYx	VxIVxW	VxIVxM	VxIVxA
VxIVxT	VxIVxS	VxIVxH	VxIVxN	VxIVxQ	VxIVxK	VxIVxG	VxIVxR	VxIVxD	VxIIlx
VxIIlx	VxIIxI	VxIIxF	VxIIxL	VxIIYx	VxIIxW	VxIIxM	VxIIxA	VxIIxT	VxIIxS
VxIIxH	VxIIxN	VxIIxQ	VxIIxK	VxILlx	VxILCx	VxILlx	VxILxR	VxILxL	VxILxY
VxILlx	VxILMx	VxILxA	VxILxT	VxILxs	VxILxH	VxIPxV	VxIFxC	VxIFxI	VxIFxF
VxIFxL	VxIFxY	VxIFxW	VxIFxM	VxICxv	VxICx	VxICxI	VxICxF	VxICxL	VxICxY
VxICxW	VxICxM	VxICxW	VxICxW	VxIwxI	VxIwx	VxIwxL	VxIwxY	VxIwxW	VxIYxV
VxIYxC	VxIYxI	VxIYxF	VxIYxL	VxIYxY	VxIYxW	VxIMxv	VxIMxC	VxIMxI	VxIMxF
VxIMxL	VxIAxV	VxIAxC	VxIAxI	VxITxV	VxVvx	VxVvx	VxVvxI	VxVvx	VxVvxL
VxVVxY	VxVVxW	VxVVxm	VxVVxA	VxVVxt	VxVVxS	VxVVxH	VxVVxN	VxVixV	VxVixC
VxVlxI	VxVlxF	VxVlxT	VxVlx	VxVlx	VxVlxM	VxVlx	VxVlxS	VxVlxH	
VxVLxV	VxVLxC	VxVLxI	VxVLxF	VxVLxL	VxVLx	VxVLxW	VxVLxM	VxVfxV	
VxVpxI	VxVpxF	VxVpxL	VxVcx	VxVcx	VxVcxI	VxVcxF	VxVwx	VxVwx	VxVwxI
VxVwx	VxVYxV	VxVYxC	VxVYxI	VxVYx	VxVm	VxVmC	VxVaxv	VxFvxV	VxFvxC
VxFVxI	VxFVxF	VxFVxl	VxFVx	VxFVx	VxFVx	VxFIx	VxFIxI	VxFIx	VxFlxV
VxFlxC	VxFFx	VxCVx	VxCVx	VxCVxI	VxCVx	VxCVxL	VxCVxY	VxCIxV	VxCIxC
VxCIxI	VxCIxV	VxCIxC	VxCIx	VxCIx	VxCIx	VxCIx	VxCIx	VxCIx	VxCIxY
VxLLxV	VxMVxV	VxMVxC	VxMVxI	VxMlxv	VxWVx	IxIVxV	IxIVxI	IxIVxF	
IxIVxL	IxIVxY	IxIVxW	IxIVxM	IxIVxA	IxIVxT	IxIVxS	IxIVxH	IxIVxN	IxIVxQ
IxIVxK	IxIVxG	IxIVxR	IxIVxD	IxIVxV	IxIIlx	IxIIlx	IxIIlx	IxIIlx	IxIIlx
IxIIlx	IxIIlxM	IxIIlxA	IxIIlxT	IxIIlxS	IxIIlxH	IxIIlxN	IxIIlxV	IxIIlxC	IxIIlxI
IxILxF	IxILxL	IxILxY	IxILxW	IxILxM	IxILxA	IxILxT	IxILxS	IxILxH	IxFIxV
IxFIxC	IxFIxI	IxFIxF	IxFIxL	IxFIxY	IxFIxW	IxFIxM	IxFIxV	IxFIxC	IxFIxI
IxICxL	IxICxI	IxICxY	IxICxW	IxIwxv	IxIwx	IxIwxI	IxIwxL	IxIwxY	
IxIYxV	IxIYxC	IxIYxI	IxIYxF	IxIYxL	IxIYxY	IxIMxv	IxIMxC	IxIMxI	IxIMxF
IxIAxV	IxIAxC	IxIAxI	IxVVxV	IxVVx	IxVVxI	IxVVx	IxVVxL	IxVVxY	IxVVxW
IxVVxM	IxVVxA	IxVVxT	IxVVxS	IxVVxH	IxVIxV	IxVIxC	IxVIxI	IxVIxF	IxVIxL
IxVIxY	IxVIxW	IxVIxM	IxVIxA	IxVIxT	IxVIxS	IxVIxH	IxVLxV	IxVLxC	IxVLxI
IxVLx	IxVLxL	IxVLxY	IxVLxW	IxVLxM	IxVfx	IxFxV	IxFxV	IxFxV	IxFxV
IxVCx	IxVCxI	IxVCx	IxVWxV	IxVWx	IxVWxI	IxVYxV	IxVYx	IxVYxI	IxVYxW
IxVMx	IxVAxV	IxFVxV	IxFVx	IxFVxI	IxFVx	IxFVxL	IxFVx	IxFIxV	IxFIxC
IxFIxI	IxFIxV	IxFIxV	IxFIxV	IxFIxI	IxFIxV	IxFIxL	IxFIxY	IxFIxC	IxFIxI
IxCLxV	IxLVxV	IxLVxC	IxLVxI	IxLVxF	IxLlxV	IxLlxC	IxLlxI	IxLlxV	IxMvxV
IxMVx	IxMVxI	IxMlxV	IxWVxV	CxIVxV	CxIVx	CxIVxI	CxIVxF	CxIVxL	CxIVxY
CxIVxW	CxIVxM	CxIVxA	CxIVxT	CxIVxS	CxIVxH	CxIVxN	CxIVxQ	CxIVxK	CxIVxG
CxIIxV	CxIIxC	CxIIxI	CxIIxF	CxIIxL	CxIIxY	CxIIxW	CxIIxM	CxIIxA	CxIIxT

CxIIxS	CxIIxH	CxILxV	CxILxC	CxILxI	CxILxF	CxILxL	CxILxY	CxILxW	CxILxM
CxILxA	CxIFxV	CxIFxC	CxIFxI	CxIFxF	CxIFxL	CxIFxY	CxICxV	CxICxC	CxICxI
CxICxF	CxICxL	CxIWxV	CxIWxC	CxIWxI	CxIWxF	CxIYxV	CxIYxC	CxIYxI	CxIYxF
CxIMxV	CxIMxC	CxIMxI	CxIAxV	CxIAxC	CxVVxV	CxVVxC	CxVVxI	CxVVxF	CxVVxL
CxVVxY	CxVVxW	CxVVxM	CxVVxA	CxVVxT	CxVVxS	CxVVxH	CxVIxV	CxVIxC	CxVIxI
CxVIxF	CxVIxL	CxVIxY	CxVIxW	CxVIxM	CxVLxV	CxVLxC	CxVLxI	CxVLxF	CxVLxL
CxVLxY	CxVFxV	CxVFxC	CxVFxI	CxVCxV	CxVCxC	CxVCxI	CxVWxV	CxVWxC	CxVYxF
CxVYxC	CxVMxV	CxFVxV	CxFVxC	CxFVxI	CxFVxF	CxFIxV	CxFIxC	CxFIxI	CxFIxV
CxCVxV	CxCVxC	CxCVxI	CxCVxF	CxCIxV	CxCIxC	CxCLxV	CxLVxV	CxLVxC	CxLVxI
CxCLxV	CxLIxC	CxMVxV	CxMVxC	CxMIxV	LxIVxV	LxIVxI	LxIVxF	LxIVxL	LxIVxK
LxIVxY	LxIVxW	LxIVxM	LxIVxA	LxIVxT	LxIVxS	LxIVxH	LxIVxN	LxIVxQ	LxIVxK
LxIIxI	LxIIxC	LxIIxI	LxIIxI	LxIIxL	LxIIxY	LxIIxW	LxIIxM	LxIIxA	LxIIxT
LxIIxS	LxIIxH	LxILxV	LxILxC	LxILxI	LxILxF	LxILxL	LxILxY	LxILxW	LxILxM
LxIFxV	LxIFxC	LxIFxI	LxIFxF	LxIFxL	LxIFxY	LxICxV	LxICxC	LxICxI	LxICxF
LxICxL	LxIWxV	LxIWxC	LxIWxI	LxIWxF	LxIYxV	LxIYxC	LxIYxI	LxIYxF	LxIMxV
LxIMxC	LxIMxI	LxIAxV	LxVVxV	LxVVxC	LxVVxI	LxVVxF	LxVVxL	LxVVxY	LxVVxW
LxVVxM	LxVVxA	LxVVxT	LxVVxS	LxVVxH	LxVIxV	LxVIxC	LxVIxI	LxVIxF	LxVIxL
LxVIxY	LxVIxW	LxVIxM	LxVLxV	LxVLxC	LxVLxI	LxVLxF	LxVLxL	LxVLxY	LxVFxF
LxVFxF	LxVFxI	LxVCxV	LxVCxC	LxVVxV	LxVVxW	LxVVxF	LxVVxC	LxVMxV	LxFVxF
LxFVxC	LxFVxI	LxFVxF	LxFIxV	LxFIxI	LxFIxV	LxCVxV	LxCVxC	LxCIxI	LxCIxV
LxCIxC	LxCLxV	LxLVxV	LxLVxC	LxLVxI	LxLIxV	LxMVxV	LxMixV	FxIVxV	FxIVxC
FxIVxI	FxIVxF	FxIVxL	FxIVxY	FxIVxW	FxIVxM	FxIVxA	FxIVxT	FxIVxS	FxIVxH
FxIIxV	FxIIxC	FxIIxI	FxIIxF	FxIIxL	FxIIxY	FxIIxW	FxIIxM	FxIIxA	FxIIxT
FxIIxS	FxIIxH	FxILxV	FxILxC	FxILxI	FxILxF	FxILxL	FxILxY	FxILxW	FxILxM
FxIPxF	FxIPxC	FxIPxI	FxIPxF	FxICxV	FxICxC	FxICxI	FxICxF	FxIWxV	FxIWxC
FxIWxI	FxIYxV	FxIYxC	FxIYxI	FxIMxV	FxIMxC	FxIAxV	FxIVxV	FxIVxC	FxIVxI
FxVVxF	FxVVxL	FxVVxY	FxVVxM	FxVVxS	FxVVxF	FxVVxT	FxVIxV	FxVIxC	FxVIxI
FxVIxF	FxVIxL	FxVIxY	FxVIxW	FxVIxM	FxVLxV	FxVLxC	FxVLxI	FxVLxF	FxVFxF
FxVFxC	FxVCxV	FxVVxW	FxVVxV	FxFVxV	FxFVxC	FxFVxI	FxFIxV	FxCVxV	FxCVxC
FxCIxV	FxLVxV	FxLVxC	FxLIxV	FxMVxV	MxIVxV	MxIVxC	MxIVxI	MxIVxF	MxIVxL
MxIVxY	MxIVxW	MxIVxM	MxIVxA	MxIVxT	MxIVxS	MxIVxH	MxIIxV	MxIIxC	MxIIxI
MxIIxP	MxIIxL	MxIIxY	MxIIxW	MxIIxM	MxILxV	MxILxL	MxILxI	MxILxF	MxILxL
MxILxY	MxIFxV	MxIFxC	MxIFxI	MxICxV	MxICxC	MxIWxV	MxIWxC	MxIVxV	MxIVxI
MxIMxV	MxVVxV	MxVVxC	MxVVxI	MxVVxF	MxVVxL	MxVVxY	MxVVxW	MxVVxM	MxVIxV
MxVIxC	MxVIxI	MxVIxF	MxVIxL	MxVLxV	MxVLxL	MxVLxI	MxVFxF	MxVCxV	MxFVxF
MxFVxC	MxFIxV	MxCVxV	MxLVxV	WxIVxV	WxIVxC	WxIVxI	WxIVxF	WxIVxL	WxIVxY
WxIVxW	WxIVxM	WxIVxA	WxIVxT	WxIVxS	WxIVxH	WxIIxV	WxIIxC	WxIIxI	WxIIxF
WxIIxL	WxIIxY	WxIIxW	WxIIxM	WxILxV	WxILxC	WxILxI	WxILxF	WxILxL	WxILxY
WxIFxF	WxIFxI	WxICxV	WxICxI	WxIWxV	WxIWxC	WxIWxI	WxIVxV	WxIVxC	WxIMxV
WxVVxV	WxVVxC	WxVVxI	WxVVxF	WxVVxL	WxVVxW	WxVVxF	WxVVxM	WxVIxV	WxVIxC
WxVIxI	WxVIxF	WxVIxL	WxVLxV	WxVLxC	WxVLxI	WxVFxF	WxVCxV	WxFVxF	WxFVxC
WxFIxV	WxCVxV	WxLVxV	GxIVxV	GxIVxC	GxIVxI	GxIVxF	GxIVxL	GxIVxY	GxIVxW
GxIVxM	GxIIxV	GxIIxC	GxIIxI	GxIIxF	GxIIxL	GxILxV	GxILxC	GxILxI	GxIFxF
GxICxV	GxVVxV	GxVVxC	GxVVxI	GxVVxF	GxVIxV	GxVIxC	GxVIxI	GxVLxV	YxIVxV
YxIVxC	YxIVxI	YxIVxF	YxIVxL	YxIVxY	YxIVxW	YxIVxM	YxIIxV	YxIIxC	YxIIxI
YxIIxF	YxIIxL	YxILxV	YxILxC	YxILxI	YxIFxV	YxICxV	YxVVxF	YxVVxC	YxVVxI
YxVxF	YxVIxV	YxVIxF	YxVIxI	YxVLxV	AxIVxV	AxIVxC	AxIVxI	AxIVxF	AxIVxL
AxIVxY	AxIVxW	AxIIxV	AxIIxI	AxIIxF	AxILxV	AxILxC	AxVxV	AxVxF	AxVxI
AxVxI	AxVxV	AxVxI	AxVxC	AxVxW	HxIVxV	HxIVxI	HxIIxV	HxIIxC	HxILxV
HxVVxV	TxIVxV	TxIVxC	TxIVxI	TxIIxF	TxVVxV	SxIVxV	SxIVxC	SxIIxV	QxIVxV
QxIVxC	QxIIxV	KxIVxV	NxIVxV	VxIxIV	VxIxI	VxIxII	VxIxIF	VxIxIL	VxIxIY
VxIxIW	VxIxIM	VxIxIA	VxIxIT	VxIxI	VxIxIH	VxIxWV	VxIxWC	VxIxWI	VxIxWF
VxIxWL	VxIxWV	VxIxWM	VxIxPV	VxIxFC	VxIxFI	VxIxFF	VxVxF	VxVxCV	VxVxCC
VxVxCI	VxVxYV	VxVxYC	VxVxYI	VxVxMV	VxVxMC	VxVxMI	VxVxVV	VxVxVC	VxVxVI
VxVxLV	VxVxLC	VxFxIV	VxFxIC	VxFxWV	VxCxIV	VxCxWV	VxLxIV	IxIxIV	IxIxIC
IxIxII	IxIxIF	IxIxIL	IxIxIY	IxIxWV	IxIxIM	IxIxIA	IxIxIT	IxIxIS	IxIxIH
IxIxWV	IxIxWC	IxIxWI	IxIxWF	IxIxWL	IxIxWY	IxIxWW	IxIxWM	IxIxIV	IxIxFC
IxIxFI	IxIxFF	IxIxFL	IxIxFY	IxIxFW	IxIxFM	IxIxCV	IxIxCC	IxIxCI	IxIxCF
IxIxCL	IxIxCY	IxIxYV	IxIxYC	IxIxYI	IxIxYF	IxIxYL	IxIxMV	IxIxMC	IxIxMI
IxIxMF	IxIxVV	IxIxVC	IxIxVI	IxIxVF	IxIxLV	IxIxLI	IxIxGF	IxIxGV	IxVxIV
IxVxIC	IxVxII	IxVxIF	IxVxIL	IxVxIY	IxVxIW	IxVxIM	IxVxWV	IxVxWC	IxVxWI
IxVxWF	IxVxWL	IxVxWY	IxVxFV	IxVxFI	IxVxFF	IxVxFI	IxVxF	IxVxCC	IxVxV
IxVxCI	IxVxYI	IxVxMV	IxVxMC	IxVxVV	IxVxVC	IxVxLV	IxFxIV	IxFxV	IxCxIV

IxLxIV	CxIxIV	CxIxIC	CxIxII	CxIxIF	CxIxIL	CxIxIY	CxIxIW	CxIxIM	CxIxIA
CxIxWV	CxIxWC	CxIxWI	CxIxWF	CxIxWL	CxIxWY	CxIxWW	CxIxFV	CxIxFC	CxIxFI
CxIxFF	CxIxFL	CxIxFY	CxIxCV	CxIxCC	CxIxCI	CxIxCF	CxIxYV	CxIxYC	CxIxYI
CxIxVF	CxIxMV	CxIxMC	CxIxMI	CxIxVV	CxIxVC	CxIxVI	CxIxLV	CxIxLC	CxIxGV
CxVxIV	CxVxIC	CxVxII	CxVxIF	CxVxIL	CxVxIY	CxVxWW	CxVxWC	CxVxWI	CxVxWF
CxVxFV	CxVxFI	CxVxCV	CxVxCC	CxVxYV	CxVxMV	CxVxVV	CxVxLV	CxFxIV	
CxCxIV	LxIxIV	LxIxIC	LxIxII	LxIxIF	LxIxIL	LxIxIY	LxIxIW	LxIxIM	LxIxWV
LxIxWC	LxIxWI	LxIxWF	LxIxWL	LxIxWY	LxIxWW	LxIxPV	LxIxFC	LxIxFI	LxIxFF
LxIxFL	LxIxFY	LxIxCV	LxIxCC	LxIxCI	LxIxCF	LxIxYV	LxIxYC	LxIxYI	LxIxYF
LxIxMV	LxIxMC	LxIxMI	LxIxVV	LxIxVC	LxIxVI	LxIxLV	LxIxLC	LxVxIV	LxVxIC
LxVxII	LxVxIF	LxVxIL	LxVxIY	LxVxWV	LxVxWC	LxVxWI	LxVxFV	LxVxFI	
LxVxCV	LxVxCC	LxVxVY	LxVxMV	LxVxLV	LxFxIV	LxGxIV	FxIxIV	FxIxIC	
FxIxII	FxIxIF	FxIxIL	FxIxIY	FxIxIW	FxIxIM	FxIxWW	FxIxWC	FxIxWI	FxIxWF
FxIxWL	FxIxFV	FxIxFC	FxIxFI	FxIxFF	FxIxCV	FxIxCC	FxIxCI	FxIxYV	FxIxYC
FxIxYI	FxIxMV	FxIxMC	FxIxVV	FxIxVC	FxIxLV	FxIxIV	FxVxIC	FxVxII	FxVxIF
FxVxWV	FxVxWC	FxVxFV	FxVxFC	FxVxCV	FxVxYV	FxVxMV	FxVxVV	MxIxIV	MxIxIC
MxIxII	MxIxIF	MxIxIL	MxIxIY	MxIxWV	MxIxWC	MxIxWI	MxIxFV	MxIxFC	MxIxFI
MxIxCV	MxIxYV	MxIxMV	MxIxVV	MxIxLV	MxIxIV	MxVxIC	MxVxII	MxVxWV	MxVxFV
WxIxIV	WxIxIC	WxIxII	WxIxIF	WxIxIL	WxIxIY	WxIxWV	WxIxWC	WxIxWI	WxIxFV
WxIxFC	WxIxFI	WxIxGV	WxIxYV	WxIxMV	WxIxVV	WxIxLV	WxIxIV	WxVxIC	WxVxII
WxVxWV	WxVxFV	GxIxIV	GxIxIC	GxIxII	GxIxWV	GxIxFV	GxIxIV	YxIxIV	YxIxIC
YxIxII	YxIxWV	YxIxFV	YxVxIV	AxIxIV	AxIxIC	AxIxWV	AxVxIV	HxIxIV	VxxVIV
VxxVIC	VxxVII	VxxWV	VxxFV	VxxIV	VxxIIC	VxxIWV	IxxVIV	IxxVIC	IxxVII
IxxVWV	IxxVFV	IxxIVV	CxxVIV	CxxVIC	CxxWV	CxxIIV	LxxVIV	LxxVIC	LxxVWV
LxxIIV	FxxVIV	xIIIVIx	xIIIVW	xIIIVFx	xIIIVCx	xIIIVYx	xIIIVMx	xIIIVWx	xIIIVLx
xIIIVGx	xIIIVHx	xIIIIIx	xIIIIWx	xIIIFx	xIIICx	xIIIIYx	xIIIMx	xIIIVWx	xIIILlx
xIIIGx	xIIIHx	xIIILlx	xIIILWx	xIIIFx	xIIICx	xIIILYx	xIIILMx	xIIILVx	xIIILlx
xIIIFIx	xIIIFWx	xIIIFx	xIIIFVx	xIIIFMx	xIIIFx	xIIIFVx	xIIIFLx	xIIIClx	xIIICWx
xIIICFx	xIIICx	xIIICy	xIIICMx	xIIICVx	xIIWIx	xIIWlx	xIIWFx	xIIWCx	xIIWYx
xIIWmx	xIIWVx	xIIYIx	xIIYWx	xIIYFx	xIIYCx	xIIYYx	xIIYMyx	xIIIMIx	xIIIMWx
xIIIMPx	xIIAIx	xIVVlx	xIVVWx	xIVVfx	xIVVcx	xIVVYx	xIVVMx	xIVVVx	xIVVLx
xIVVGx	xIVVlx	xIVVlx	xIVVfx	xIVVcx	xIVVYx	xIVVIMx	xIVIVlx	xIVILx	xIVLlx
xIVLWx	xIVLFx	xIVLcx	xIVLYx	xIVLMx	xIVLvx	xIVLLx	xIVFVx	xIVFWx	xIVFpx
xIVCix	xIVCwx	xIVCFx	xIVWlx	xIVWWx	xIVYIx	xIVYVx	xIVMlx	xIVFVx	xIVFWx
xIFVpx	xIFVcx	xIFVYx	xIFIIx	xIFIWx	xIFIFx	xIFILx	xICVlx	xICVwx	xICFVx
xICVCx	xICIIx	xICIWx	xILVlx	xILVWx	xILVfx	xILVlx	xIMVlx	xIMIix	xFIVIx
xFIVWx	xFIVFx	xFIVCx	xFIVYx	xFIVMx	xFIVVx	xFIVlx	xFIVGx	xFIVhx	xFIIlx
xFIIWx	xFIIFx	xFIICx	xFIIYx	xFIIIMx	xFIIIVx	xFIIlx	xFIIGx	xFILlx	xFILWx
xFILFx	xFILCx	xFILYx	xFILMx	xFILVx	xFILLx	xFIFlx	xFIFWx	xFIFFx	xFIFCx
xFIFYx	xFIClx	xFICWx	xFICFx	xFIWlx	xFIWWx	xFIWfx	xFIYlx	xFIYwx	xFIYfx
xFIMIx	xFIMWx	xFIAIx	xFVVIx	xFVWVx	xFVVFx	xFVVCx	xFVVYx	xFVVMx	xFVVVx
xFVVLx	xFVVGx	xFVIIx	xFVIWx	xFVIFx	xFVICx	xFVIYx	xFVIMx	xFVIVx	xFVILx
xFVLlx	xFVLWx	xFVLcx	xFVLYx	xFVLYx	xFVFX	xFVFWx	xFVCIx	xFVVIx	xFVYIx
xFFVlx	xFFVWx	xFFVfx	xFFVx	xFCVlx	xFCVWx	xFCVfx	xFCIIlx	xFLVlx	xFLVWx
xFLIIx	xFMVlx	xYIVlx	xYIVWx	xYIVfx	xYIVCx	xYIVYx	xYIVMx	xYIVVx	xYIVLx
xYIVGx	xYIVHx	xYIIIX	xYIIWx	xYIIFx	xYIICx	xYIIYx	xYIIMx	xYIVVx	xYIILx
xYIIGx	xYILIx	xYILWx	xYILFx	xYILCx	xYILYx	xYILMx	xYILVx	xYILLx	xYIFIx
xYIFWx	xYIFCx	xYIFCx	xYIFYx	xYIClx	xYICWx	xYICFx	xYIWlx	xYIWwx	xYIWfx
xYIYlx	xYIYWx	xYIYFx	xYIMIx	xYIMWx	xYIAIx	xYIVVx	xYIVWx	xYVVFx	xYVVCx
xYVYVx	xYVVMx	xYVWVx	xYVVLx	xYVVGx	xYVIIx	xYVIWx	xYVIFx	xYVICx	xYVIYx
xYVIMx	xYVIVx	xYVILx	xYVLIx	xYVWLx	xYVFLx	xYVLCx	xYVLYx	xYVFLx	xYVFWx
xYVCIx	xYVWIx	xYVYIx	xYFVlx	xYFVWx	xYFVfx	xYFVlx	xYFIIx	xYCVlx	xYCVFx
xYCLlx	xYLVlx	xYLVWx	xYLIYx	xYMLVx	xVIVlx	xVIVWx	xVIVFx	xVIVCx	xVIVYx
xVIVMx	xVIVVx	xVIVlx	xVIVGx	xVIIIX	xVIIWx	xVIIFx	xVIICx	xVIIYx	xVIIIMx
xVIIIVx	xVIIILx	xVIIlx	xVILWx	xVILFx	xVILYx	xVILMx	xVILVx	xVILLx	xVILLx
xVIFIx	xVIFWx	xVIFFx	xVIClx	xVICWx	xVICFx	xVIWlx	xVIWWx	xVIYlx	xVIYWx
xVIMIx	xVVIIX	xVWVlx	xVWVFx	xVWVlx	xVWVYx	xVWVMx	xVWVWx	xVWVLx	xVWLFx
xVVIWx	xVVIIfx	xVVICx	xVVIYx	xVVIMx	xVVIWx	xVVLlx	xVVLlx	xVVLWx	xVVLFx
xVVFpx	xVVCIx	xVVFVlx	xVFFWx	xVFFlx	xVCFVx	xVFLVx	xVIVlx	xVIVWx	xVIVFx
xWIVCx	xWIVYx	xWIVMx	xWIVVx	xWIVLx	xWIVGx	xWIIlx	xWIIWx	xWIIFx	xWIIICx
xWIIYx	xWIIImx	xWIIIVx	xWIIlx	xWILlx	xWILFx	xWILCx	xWILYx	xWILMx	
xWILVx	xWIFIx	xWIFWx	xWIClx	xWIWlx	xWIYlx	xWVlx	xWVlx	xWVlx	xWVlx
xWVYVx	xWVVMx	xWVWVx	xWVWLx	xWVIIlx	xWVIIWx	xWVIFx	xWVICx	xWVYlx	xWVLIx
xWVLWx	xWVFIx	xWCVlx	xLIVlx	xLIVWx	xLIVFx	xLIVCx	xLIVYx	xLIVMx	xLIVVx
xLIVLx	xLIVGx	xLIIIx	xLIIWx	xLIIFx	xLIClx	xLIIYx	xLIMlx	xLIVVx	xLILlx
xLILlx	xLILWx	xLILFx	xLILCx	xLILYx	xLILMx	xLIFlx	xLIFWx	xLIClx	xLIWlx
xLIYlx	xLVIIX	xLVVWx	xLWVFx	xLWVlx	xLWVYx	xLWVMx	xLWVlx	xLWVLx	xLVIIX
xLVIWx	xLVIIfx	xLVICx	xLVIYx	xLVLlx	xLVLWx	xLFVlx	xLCVlx	xCIVlx	xCIVWx

xCIVFx	xCIVCx	xCIVYx	xCIVMx	xCIVVx	xCIVLx	xCIIIx	xCIIWx	xCIIFx	xCIICx
xCIYx	xCIIMx	xCIIVx	xCILx	xCILlx	xCILWx	xCILFx	xCIFIx	xCIClx	xCVIx
xCVWx	xCVFxF	xCVVCx	xCVYx	xCVVm	xCVVx	xCVIx	xCVIw	xCVIfx	xCVLlx
xMIVIx	xMIVWx	xMIVFx	xMIVCx	xMIVYx	xMIVMx	xMIVVx	xMIVLx	xMIIIx	xMIIWx
xMIIFx	xMILIx	xMVix	xMVWx	xMVFx	xMVIx	xHIVIx	xHIVWx	xHIVFx	xHIVCx
xHIVYx	xHIVMx	xHIVVx	xHIVLx	xHIIlx	xHIIWx	xHIIFx	xHIIlx	xHVVlx	xHVVWx
xHVVFx	xHVIIX	xQIVIx	xQIVWx	xQIVFx	xQIVCx	xQIIIx	xQIIWx	xQILIx	xQVVIx
xAIVIx	xAIVWx	xAIVFx	xAIIIX	xAVVlx	xTIVIx	xTIVWx	xTIVFx	xTIIIX	xTVVIx
xNIVIx	xNIVWx	xNIIIX	xNVVlx	xSIVIx	xSIVWx	xSIIIX	xGIVIx	xPIVlx	xIIVxv
xIIVxC	xIIVxI	xIIVxF	xIIVxL	xIIVYx	xIIVWx	xIIVxM	xIIVxA	xIIVxT	xIIVxS
xIIIxV	xIIIxI	xIIIxF	xIIIxL	xIIIxY	xIIIxW	xIIIxM	xIIIxV	xIIIxL	xIIIxC
xIIlxI	xIIlxF	xIIlxL	xIIlxV	xIIlxC	xIIlxV	xIIlxW	xIIlxV	xIIlxM	xIIlxV
xIVVxV	xIVVxC	xIVVxI	xIVVxF	xIVVxL	xIVVxY	xIVVxW	xIVIxV	xIVIxC	xIVIxI
xIVIxF	xIVLxV	xIVLxC	xIVFxV	xIVFxV	xIVCxV	xIVLvx	xFIVxV	xFIVxC	xFIVxI
xFIVxF	xFIVxL	xFIVyX	xFIVxM	xFIVxY	xFIVxZ	xFIVxI	xFIVxI	xFIIxI	xFIIxL
xFIIxF	xFILxV	xFILxC	xFILxI	xFIPxV	xFICxV	xFIVxV	xFIVxV	xFVVxV	xFVVxC
xFVvxI	xFVvxF	xFVvxL	xFVvxV	xFVlxC	xFVlxI	xFVLxV	xFFVxV	xYIVxV	xYIVxC
xYIVxI	xYIVxF	xYIVxL	xYIVxY	xYIVxW	xYIVxM	xYIIxV	xYIIxC	xYIIxI	xYIIxF
xYIIxL	xYIIxY	xYIIxL	xYIIxV	xYIIxI	xYIIxF	xYIIxV	xYIIxW	xYIVxV	xYVVxV
xYVVxC	xYVVxI	xYVVxF	xYVVxL	xYIVIx	xYVIVx	xYVIVx	xYVlxV	xYFVxV	xVIVxV
xVIVxC	xVIVxI	xVIVxF	xVIVxL	xVIVYx	xVIVxW	xVIIxV	xVIIxC	xVIIxI	xVIIxF
xVILxV	xVILxC	xVIFxV	xVIVVx	xVIVVx	xVIVVxI	xVIVVxF	xVVIxV	xVVIxC	xVVLxV
xWIVxV	xWIVxC	xWIVxI	xWIVxF	xWIVxL	xWIVxW	xWIIxV	xWIIxC	xWIIxI	xWILxV
xWVVxV	xWVVxC	xWVVxI	xWVVxV	xLIVxV	xLIVxC	xLIVxI	xLIVxW	xLIVxL	xLIIxV
xLIlxC	xLIIXI	xLIIlxV	xLIVVxV	xLIVVx	xLIVVxI	xLIVVxV	xCIVxV	xCIVxC	xCIVxI
xCIVxF	xCIIxV	xCIIxI	xCLlxV	xCIVVx	xCIVVx	xCIVlxV	xMIVxV	xMIVxC	xMIIxV
xMIVVx	xHIVVx								
xIIIXF	xIIIXIL	xIIIXW	xIIIXC	xIIIXW	xIIIXF	xIIIXFC	xIIIXV	xIIIXMV	xIIIXV
xIIIXV	xIIIVxV	xIIIVxI	xIIIVxF	xIIIVxV	xIIIVxF	xIIIVxI	xIIIVxW	xIIIVxV	xIIIVxC
xFIxFV	xFIxFCV	xFVxIV	xYIIXIV	xYIIXC	xYIIXII	xYIIXW	xYIIXC	xYIIXF	xYIxCV
xYVxIV	xYVxIV	xVIXIC	xVIXW	xVIXFV	xVIVxV	xWIVxV	xWIVxV	xCIXIV	xxIVIV
xxIVIC	xxIVII	xxIVIF	xxIVIL	xxIVYI	xxIVIW	xxIVIM	xxIVIA	xxIVIT	xxIVIS
xxIVIH	xxIVIN	xxIVIQ	xxIVIK	xxIVIG	xxIVIR	xxIVID	xxIVIE	xxIVWV	xxIVWC
xxIVWI	xxIVWF	xxIVWL	xxIVWY	xxIVWW	xxIVWM	xxIVWA	xxIVWT	xxIVWS	xxIVWH
xxIVWN	xxIVWQ	xxIVWK	xxIVWG	xxIVWR	xxIVFV	xxIVFC	xxIVFI	xxIVFF	xxIVFL
xxIVFY	xxIVFW	xxIVFM	xxIVFA	xxIVFT	xxIVFS	xxIVFV	xxIVFN	xxIVFQ	xxIVFK
xxIVFG	xxIVCV	xxIVCC	xxIVCI	xxIVCF	xxIVCL	xxIVCY	xxIVCW	xxIVCM	xxIVCA
xxIVCT	xxIVCS	xxIVCH	xxIVYV	xxIVYC	xxIVYI	xxIVYF	xxIVYL	xxIVYY	xxIVYW
xxIVYM	xxIVYA	xxIVYT	xxIVYS	xxIVYH	xxIVMV	xxIVMC	xxIVMI	xxIVMF	xxIVML
xxIVMY	xxIVMW	xxIVMM	xxIVM	xxIVMT	xxIVMS	xxIVMH	xxIVVV	xxIVVC	xxIVVI
xxIVVF	xxIVWL	xxIVVW	xxIVVW	xxIVVM	xxIVVA	xxIVVT	xxIVVS	xxIVVH	xxIVLV
xxIVLC	xxIVLI	xxIVLF	xxIVLL	xxIVLY	xxIVLW	xxIVLM	xxIVLA	xxIVLT	xxIVLS
xxIVLH	xxIVGV	xxIVGC	xxIVGI	xxIVGF	xxIVGL	xxIVGY	xxIVGW	xxIVHV	xxIVHC
xxIVHI	xxIVHF	xxIVTV	xxIVTC	xxIVPV	xxIVPC	xxIVAV	xxIVNV	xxIVQV	xxIIIV
xxIIIC	xxIIII	xxIIIL	xxIIIL	xxIIIV	xxIIII	xxIIIM	xxIIIA	xxIIIT	xxIIIS
xxIIIH	xxIIIN	xxIIIQ	xxIIIK	xxIIIG	xxIIIR	xxIIIV	xxIIIC	xxIIWI	xxIIWF
xxIIIL	xxIIWY	xxIIW	xxIIWM	xxIIWA	xxIIWT	xxIIWS	xxIIWH	xxIIWN	xxIIIFV
xxIIIFC	xxIIIF	xxIIIF	xxIIIF	xxIIIFW	xxIIIF	xxIIIF	xxIIIFA	xxIIIFT	xxIIIFS
xxIIIFH	xxIIICV	xxIIICC	xxIIIC	xxIIICF	xxIIICL	xxIIICY	xxIIICW	xxIIICM	xxIIICA
xxIIICT	xxIIICS	xxIIICH	xxIIYV	xxIIYC	xxIIYI	xxIIYF	xxIIYL	xxIIYYY	xxIIYW
xxIIIM	xxIIYA	xxIIYT	xxIIYS	xxIIIM	xxIIIMC	xxIIIMI	xxIIIMF	xxIIIML	xxIIIMY
xxIIIMW	xxIIIMM	xxIIIMA	xxIIIMT	xxIIIV	xxIIIVC	xxIIIVI	xxIIIVF	xxIIIVL	xxIIIVY
xxIIIVW	xxIIVM	xxIIVA	xxIIVT	xxIIIV	xxIIILC	xxIIIL	xxIIILF	xxIIILL	xxIIILY
xxIIILW	xxIIILM	xxIIIGV	xxIIIG	xxIIIGI	xxIIIGF	xxIIIVH	xxIIICH	xxIIIFI	xxIIITV
xxIIIPV	xxIIAV	xxIIILV	xxIIIC	xxIIIL	xxIIIF	xxIIIL	xxIIILY	xxIIILW	xxIIILIM
xxIIILIA	xxIIIL	xxILIS	xxILIH	xxILW	xxILWC	xxILWI	xxILWF	xxILWL	xxILWY
xxILW	xxILW	xxILWA	xxILWT	xxILWS	xxILWH	xxILFV	xxILFC	xxILFI	xxILFF
xxILFL	xxILFY	xxILFW	xxILFM	xxILFA	xxILFT	xxILCV	xxILCC	xxILCI	xxILCF
xxILCL	xxILCY	xxILCW	xxILCM	xxILV	xxILYC	xxILYI	xxILYF	xxILYL	xxILYY
xxILY	xxILYM	xxILMV	xxILMC	xxILMI	xxILMF	xxILML	xxILMY	xxILMW	xxILVV
xxILVC	xxILVI	xxILVF	xxILVL	xxILVY	xxILVW	xxILV	xxILLC	xxILLI	xxILLF
xxILL	xxILLY	xxILGV	xxILGC	xxILHV	xxIFIV	xxIFIC	xxIFII	xxIFIF	xxIFIL
xxIFIY	xxIFIW	xxIFIM	xxIFI	xxIFIT	xxIFW	xxIFWC	xxIFWI	xxIFWF	xxIFWL
xxIFWY	xxIFWW	xxIFWM	xxIFFV	xxIFFC	xxIFFI	xxIFFF	xxIFFL	xxIFFY	xxIFCV
xxIFCC	xxIFCI	xxIFCF	xxIFYV	xxIFYC	xxIFYI	xxIFYF	xxIFMV	xxIFMC	xxIFMI
xxIFMF	xxIFVV	xxIFVC	xxIFVI	xxIFVF	xxIFLV	xxIFLC	xxIFLI	xxIFGV	xxICIV
xxICIC	xxICII	xxICIF	xxICIL	xxICIY	xxICIW	xxICIM	xxICWV	xxICWC	xxICWI
xxICWF	xxICWL	xxICWY	xxICWW	xxICFV	xxICFI	xxICFI	xxICFF	xxICFL	xxICFY

xxICCV	xxICCC	xxICCI	xxICCF	xxICYV	xxICYC	xxICYI	xxICMV	xxICMC	xxICMI
xxICVV	xxICVC	xxICVI	xxICLV	xxICLC	xxIWIV	xxIWIC	xxIWII	xxIWIF	xxIWIL
xxIWIY	xxIWIW	xxIWIM	xxIWWV	xxIWWC	xxIWWI	xxIWWF	xxIWWL	xxIWWY	xxIWVF
xxIWFC	xxIWFI	xxIWFF	xxIWCV	xxIWCC	xxIWCI	xxIWVW	xxIWYC	xxIWYI	xxIWMV
xxIWMC	xxIWMI	xxIWVV	xxIWVC	xxIWVI	xxIWLV	xxIWLC	xxIYIV	xxIYIC	xxIYII
xxIYIF	xxIYIL	xxIYIY	xxIYIW	xxIYIM	xxIYVW	xxIYWC	xxIYWI	xxIYWF	xxIYWL
xxIYWY	xxIYFV	xxIYFC	xxIYFI	xxIYFF	xxIYCV	xxIYCC	xxIYCI	xxIYYY	xxIYYC
xxIYVI	xxIYMV	xxIYMC	xxIYMI	xxIYVV	xxIYVC	xxIYLV	xxIYLC	xxIMIV	xxIMIC
xxIMII	xxIMIF	xxIMIL	xxIMIY	xxIMIW	xxIMWV	xxIMWC	xxIMWI	xxIMWF	xxIMFV
xxIMFC	xxIMFI	xxIMCV	xxIMCC	xxIMVY	xxIMYC	xxIMMV	xxIMVV	xxIMLV	xxIAIV
xxIAIC	xxIAII	xxIAIF	xxIAWV	xxIAWC	xxIAFC	xxIACV	xxIAYV	xxIAMV	
xxIAVV	xxITIV	xxINIV	xxVIVV	xxVVIC	xxVVI	xxVVIF	xxVVIL	xxVVIV	xxVVIV
xxVVIM	xxVVIA	xxVVIT	xxVVIS	xxVVIH	xxVVIN	xxVVIQ	xxVVIK	xxVVIG	xxVVVV
xxVVMC	xxVVIW	xxVVWF	xxVVL	xxVVWY	xxVVW	xxVVM	xxVVWA	xxVVWT	xxVVWS
xxVVWH	xxVVFV	xxVVFC	xxVVFI	xxVVFF	xxVVFL	xxVVFY	xxVVFW	xxVVFM	xxVVFA
xxVVPT	xxVVFS	xxVVPH	xxVVCV	xxVVCC	xxVVCI	xxVVCF	xxVVCL	xxVVCY	xxVVCG
xxVVCM	xxVVCA	xxVVCT	xxVVCS	xxVVV	xxVVYC	xxVVYI	xxVVYF	xxVVYL	xxVVYY
xxVVW	xxVVY	xxVVYA	xxVVM	xxVVM	xxVVMI	xxVVMF	xxVVML	xxVVMY	xxVVMW
xxVVMM	xxVVV	xxVVVC	xxVVVI	xxVVVF	xxVVVL	xxVVVY	xxVVW	xxVVVM	xxVVVL
xxVVL	xxVVL	xxVVL	xxVLL	xxVVLY	xxVVWL	xxVVLM	xxVVGV	xxVVGC	xxVVGI
xxVVGF	xxVVHV	xxVVHC	xxVVTV	xxVII	xxVIIC	xxVIII	xxVII	xxVII	xxVIIY
xxVIIW	xxVII	xxVIIA	xxVII	xxVIIS	xxVIIH	xxVIW	xxVIWC	xxVIWI	xxVIWF
xxVIWL	xxVIW	xxVIW	xxVIW	xxVIWA	xxVIWT	xxVIWS	xxVIF	xxVIFC	xxVIFI
xxVIFF	xxVIFL	xxVIFY	xxVIFW	xxVIFM	xxVIFA	xxVICV	xxVICC	xxVICI	xxVICF
xxVICL	xxVICY	xxVICW	xxVICM	xxVIYV	xxVIYC	xxVIYI	xxVIYF	xxVIYL	xxVIYY
xxVIW	xxVIMV	xxVIMC	xxVIMI	xxVIMF	xxVIML	xxVIMY	xxVIMW	xxVIVV	xxVIVC
xxVIVI	xxVIVF	xxVIVL	xxVIV	xxVIVW	xxVIL	xxVIL	xxVILL	xxVILL	xxVILL
xxVIGV	xxVIGH	xxVIL	xxVIL	xxVILC	xxVILI	xxVILF	xxVIL	xxVLIY	xxVLIW
xxVLIM	xxVLIA	xxVLIT	xxVLIS	xxVLW	xxVLWC	xxVLWI	xxVLWF	xxVLWL	xxVLWY
xxVLWW	xxVLWM	xxVLFV	xxVLFC	xxVLFI	xxVLFF	xxVLFL	xxVLFY	xxVLFW	xxVLCV
xxVLCC	xxVLCI	xxVLCF	xxVLYV	xxVLYC	xxVLYI	xxVLYF	xxVLMV	xxVLMC	xxVLCI
xxVLM	xxVLLV	xxVLC	xxVLLV	xxVLLV	xxVLLV	xxVLLC	xxVLLI	xxVLLV	xxVFLV
xxVFLC	xxVFI	xxVFF	xxVFI	xxVFIY	xxVFIW	xxVFW	xxVFWC	xxVFWI	xxVFWF
xxVFF	xxVFFC	xxVFFI	xxVFCV	xxVFC	xxVFYV	xxVFYC	xxVFMV	xxVFFF	xxVFLV
xxVCIV	xxVCIC	xxVCII	xxVCIF	xxVCIL	xxVCIY	xxVCWV	xxVCWC	xxVCWI	xxVCFV
xxVCFC	xxVCFI	xxVCV	xxVCYV	xxVCMV	xxVCVV	xxVCLV	xxVWIV	xxVWIC	xxVWII
xxVWIF	xxVWIL	xxVWW	xxVWC	xxVWI	xxVWFV	xxVWFC	xxVWC	xxVWV	xxVWMV
xxVWW	xxVYIV	xxVYIC	xxVYII	xxVYIF	xxVYIL	xxVYVW	xxVYWC	xxVYWI	xxVYFV
xxVYFC	xxVYCV	xxVYVV	xxVVM	xxVYV	xxVMIV	xxVMIC	xxVMII	xxVMWV	xxVMWC
xxVMFV	xxVMCV	xxVAIV	xxVAIC	xxVAW	xxFVIV	xxFVIC	xxFVII	xxFVIF	xxFVIL
xxFVII	xxFVIW	xxFVIM	xxFVW	xxFVWC	xxFVWI	xxFVWF	xxFVWL	xxFVY	xxFVFW
xxFVFC	xxFVFI	xxFVFF	xxFVCV	xxFVCC	xxFVCI	xxFVYV	xxFVYC	xxFVYI	xxFVMV
xxFVMC	xxFVVF	xxFVVC	xxFVVL	xxFVIV	xxFII	xxFII	xxFII	xxFII	xxFIIY
xxFIWV	xxFIWI	xxFIWI	xxFIW	xxFIF	xxFICI	xxFICV	xxFIYV	xxFIMV	xxFIVV
xxFLIV	xxFLIV	xxFLIC	xxFLII	xxFLW	xxFLFV	xxFFIV	xxFCIV	xxFIV	xxCVIV
xxCVIC	xxCVII	xxCVIF	xxCVIL	xxCVIY	xxCVI	xxCVW	xxCVWC	xxCVWI	xxCVWF
xxCVFV	xxCVFC	xxCVFI	xxCVFF	xxCVCV	xxCVCC	xxCVV	xxCVYC	xxCVMC	xxCVCMC
xxCVVV	xxCVVC	xxCVLV	xxCIIV	xxCIIC	xxCIII	xxCIIF	xxCIW	xxCIWC	xxCIWI
xxCIVF	xxCIFC	xxCIVC	xxCIVY	xxCIMV	xxCIVV	xxCLIV	xxCLIC	xxCLW	xxCLFV
xxCFIV	xxLVIV	xxLVIC	xxLVII	xxLVIF	xxLVIL	xxLVIY	xxLVIW	xxLVW	xxLWV
xxLWVI	xxLWVF	xxLWVF	xxLWFC	xxLWFI	xxLVCV	xxLVC	xxLWV	xxLWV	xxLVMV
xxLWV	xxLWLV	xxLIVV	xxLIIC	xxLIII	xxLIIIF	xxLIW	xxLIWC	xxLIFV	xxLIFC
xxLICV	xxLIYV	xxLIMV	xxLIVV	xxLLIV	xxLLIC	xxLLW	xxLLFV	xxLFIV	xxMIVV
xxMVIC	xxMVII	xxMVIF	xxMVWV	xxMVWC	xxMVFV	xxMVFC	xxMVCV	xxMVYV	xxMVMV
xxMVVV	xxMIVV	xxMIIC	xxMIWV	xxMIFV	xxMLIV	xxWIV	xxWVIC	xxWVW	xxWIIV
xxYVIV									

Table S2: Amyloid patterns for restricted substitutions with small, non-polar residues

In the table we list all the existing minimal patterns of amyloid-forming hexapeptides, computed from the SVM model of the Budapest Amyloid Predictor, when the substitutions for the positions, denoted by “x” are allowed by small, non-polar residues, namely G, A, S and T. The table contains 411 patterns.

0	1	2	3	4	5	6	7	8	9
VIIxxx	IIIxxx	VxIVxx	VxIIxx	VxILxx	VxIFxx	VxICxx	VxIWxx	VxIYxx	VxIMxx
VxVVxx	VxVIxx	VxVLxx	VxFVxx	VxFVxx	VxCVxx	VxLVxx	IxIVxx	IxIIxx	IxILxx
IxFVxx	IxICxx	IxIWxx	IxIYxx	IxVxx	IxVIxx	IxVLxx	IxFVxx	IxFVxx	IxCVxx
IxLVxx	CxIVxx	CxIIxx	CxILxx	CxFIXx	CxICxx	CxIWxx	CxIYxx	CxVVxx	CxVIxx
CxVLxx	CxFVxx	LxIVxx	LxIIxx	LxILxx	LxIFxx	LxICxx	LxIWxx	LxVVxx	LxVIxx
LxVLxx	FxIVxx	FxIIxx	FxILxx	FxVxx	FxVIxx	FxVLxx	MxIVxx	MxIIxx	MxILxx
MxVVxx	MxVIxx	WxIVxx	WxIIxx	WxILxx	WxVxx	WxVIxx	GxIVxx	GxIIxx	GxVVxx
YxIVxx	YxIIxx	YxVVxx	AxIVxx	VxIxIx	VxIxWx	VxFx	VxIxCx	VxIxYx	VxIxMx
VxIxVx	VxIxLx	VxVxIx	VxVxWx	VxVxFx	IxIxIx	IxIxWx	IxFx	IxIxCx	IxIxYx
IxIxMx	IxIxVx	IxVxIx	IxVxWx	IxVxFx	CxIxIx	CxIxWx	CxFx	CxIxCx	CxIxYx
CxVxIx	LxIxIx	LxIxWx	LxIxFx	LxIxCx	FxIxIx	FxIxWx	FxFx	FxFx	FxVxIx
MxIxIx	WxIxIx	WxIxVx	VxIxIx	VxVxx	IxIxV	IxIxC	CxIxV	LxIxV	xIIVxx
xIIIx	xIILxx	xIIFxx	xIIICxx	xIIWxx	xIYYxx	xIVVxx	xIVIx	xIVLxx	xIFVxx
xFIVxx	xFIIxx	xFILxx	xFIFxx	xFVxx	xFVIxx	xFVLxx	xYIVxx	xYIIxx	xYILxx
xYIFxx	xYVWxx	xYVlx	xYVLxx	xIVVxx	xVIIxx	xVILxx	xVVxx	xVVIxx	xWIVxx
xWIIxx	xWILxx	xWVxx	xWVlx	xVIIxx	xVlx	xLILxx	xLVVxx	xLVIxx	xCIVxx
xCIxx	xCVVxx	xMIVxx	xHIVxx	xIIIx	xIIxWx	xIIxFx	xIIxC	xIIxYx	xIVxIx
xIVxWx	xFIxIx	xFIxWx	xFIxFx	xFVxx	xYIxIx	xYIxWx	xYIxFx	xYVxIx	xVIXIx
xVIXWx	xWlx	xLlx	xLlx	xFxx	xYIxV	xYIxW	xxIVWx	xxIVFx	xxIVCx
xxIVYx	xxIVMx	xxIVVx	xxIVLx	xxIVGx	xxIVHx	xxIVTx	xxIIIx	xxIIWx	xxIIIfx
xxIICx	xxIIIy	xxIIIMx	xxIIIVx	xxIIILx	xxIIIGx	xxIIHx	xxILIx	xxILWx	xxILFx
xxILCx	xxILYx	xxILMx	xxILVx	xxILLx	xxILGx	xxIFIx	xxIFWx	xxIFFx	xxIFCx
xxIFYx	xxIFMx	xxIFVx	xxIFLx	xxIClx	xxICWx	xxICFx	xxICCx	xxICYx	xxICMx
xxICVx	xxICLx	xxIWlx	xxIWlx	xxIWfx	xxIWcx	xxIWmx	xxIWVx	xxIYIx	xxIYIx
xxIYwx	xxIYFx	xxIYCx	xxIYYx	xxIYmx	xxIYVx	xxIMIx	xxIMWx	xxIMFx	xxIAIx
xxIAWx	xxVVIx	xxVVWx	xxVVFx	xxVVCx	xxVVYx	xxVVMx	xxVVVx	xxVVLx	xxVVGx
xxVWhx	xxVIIx	xxVIWx	xxVIFx	xxVICx	xxVIYx	xxVIMx	xxVIVx	xxVILx	xxVIGx
xxVLIx	xxVLWx	xxVLFx	xxVLCx	xxVLYx	xxVLMx	xxVLLx	xxVFLx	xxVFWx	xxVFWx
xxVFFx	xxVFCx	xxVCIx	xxVCWx	xxVCFx	xxVWIx	xxVWwx	xxVWFx	xxVVIx	xxVWVx
xxVYFx	xxVMIx	xxFVlx	xxFVWx	xxFVfx	xxFVCx	xxFVyx	xxFVMx	xxFVVx	xxFIIx
xxFIWx	xxFIFx	xxFLlx	xxCVIx	xxCVWx	xxCVFx	xxCVCx	xxCVYx	xxCIIx	xxCIWx
xxCIFx	xxCLIx	xxLVIx	xxLVWx	xxLVfx	xxLVCx	xxLIIx	xxLIWx	xxLLIx	xxMVIx
xxMVWx	xxMIIx	xxWVlx	xxIVxV	xxIVxC	xxIVxI	xxIVxF	xxIVxL	xxIVxY	xxIVxW
xxIVxM	xxIVxA	xxIVxT	xxIVxS	xxIVxH	xxIIxV	xxIIxC	xxIIxI	xxIIxF	xxIIxL
xxIIIxY	xxIIIxW	xxIIxM	xxIIlx	xxIIxC	xxIIlx	xxIIxF	xxIIxL	xxIIxY	xxIFxV
xxIFxC	xxIFxI	xxICxV	xxICxC	xxIWx	xxIWx	xxIYxV	xxIYxC	xxIMxV	xxVVxV
xxVvxC	xxVvxI	xxVVxF	xxVVxL	xxVYx	xxVVxW	xxVVxM	xxVIVx	xxVlx	xxVlxI
xxVIxF	xxVIxL	xxVIxY	xxVLxV	xxVLx	xxVLxI	xxVFxV	xxVCxV	xxFVxV	xxFVxC
xxFIVx	xxCVxV	xxLVxV	xxIXIV	xxIXIC	xxIXII	xxIXIF	xxIxIL	xxIxIY	xxIxIW
xxIxWV	xxIxWC	xxIxWI	xxIxWF	xxIxFV	xxIxFC	xxIxFI	xxIxCV	xxIxCC	xxIxYV
xxIxYC	xxIxMV	xxIxVV	xxIxLV	xxVxIV	xxVxIC	xxVxII	xxVxWV	xxVxWC	xxVxFV
xxVxCV									