```perl
#!/usr/bin/env perl -w
# use strict;


# This program creates a text file that can be fed into the cutpointmapper.pl
algorithm that has all possible combinations of leaving 5 out.  Set the $genetotal
value to the number of transcript expression measurements/subjects for a given gene.


my $genetotal = 35;
my $lastvaluelimit = $genetotal - 1;

open OUTPUTLIST, ">combinatorial-1";
foreach (1..$genetotal) {  # Uses $_ by default
    print "$_\n";
    print OUTPUTLIST "$_\n";
}
close OUTPUTLIST;


open INPUTLIST, "<combinatorial-1";
open OUTPUTLIST, ">combinatorial-2";
while (my $lastvalue = <INPUTLIST>) {
    if ($lastvalue < $genetotal) {
    my $lastvalueplus = $lastvalue + 1;
        foreach ($lastvalue..$lastvaluelimit) {
            chomp ($lastvalue);
            print "$lastvalue,$lastvalueplus\n";
            print OUTPUTLIST "$lastvalue,$lastvalueplus\n";
            $lastvalueplus = $lastvalueplus +1;
        }
    }
}
close OUTPUTLIST;
close INPUTLIST;


open INPUTLIST, "<combinatorial-2";
open OUTPUTLIST, ">combinatorial-3";
while (my $line = <INPUTLIST>) {
($lastvalue) = ($line =~ /(\d*\n)/);
chomp ($lastvalue);
    if ($lastvalue < $genetotal) {
        my $lastvalueplus = $lastvalue + 1;
        foreach ($lastvalue..$lastvaluelimit) {
            chomp ($line);
            print "$line,$lastvalueplus\n";
            print OUTPUTLIST "$line,$lastvalueplus\n";
            $lastvalueplus = $lastvalueplus +1;
        }
    }
}
close OUTPUTLIST;
close INPUTLIST;


open INPUTLIST, "<combinatorial-3";
open OUTPUTLIST, ">combinatorial-4";
while (my $line = <INPUTLIST>) {
($lastvalue) = ($line =~ /(\d*\n)/);
chomp ($lastvalue);
    if ($lastvalue < $genetotal) {
```

```
                              combinatorialcreation.pl
        my $lastvalueplus = $lastvalue + 1;
        foreach ($lastvalue..$lastvaluelimit) {
            chomp ($line);
            print "$line,$lastvalueplus\n";
            print OUTPUTLIST "$line,$lastvalueplus\n";
            $lastvalueplus = $lastvalueplus +1;
        }
    }
}
close OUTPUTLIST;
close INPUTLIST;


open INPUTLIST, "<combinatorial-4";
open OUTPUTLIST, ">combinatorial$genetotal-5";
while (my $line = <INPUTLIST>) {
($lastvalue) = ($line =~ /(\d*\n)/);
chomp ($lastvalue);
    if ($lastvalue < $genetotal) {
        my $lastvalueplus = $lastvalue + 1;
        foreach ($lastvalue..$lastvaluelimit) {
            chomp ($line);
            print "$line,$lastvalueplus\n";
            print OUTPUTLIST "$line,$lastvalueplus\n";
            $lastvalueplus = $lastvalueplus +1;
        }
    }
}
close OUTPUTLIST;
close INPUTLIST;


# Use this last file (combinatorial$genetotal-5) as the list to leave-5-out analysis
for deriving cutoffs (cutoffmapper.pl).
```