

```

1  #!/usr/local/bin/perl5 -w
2
3  $input1 = 'chaintest.scan';
4  $output= "OUT";
5  $output2= "OUT.out";
6
7  open (INFILE,$input1)||die "cannot open $input1";
8  open(OUTFILE,">$output")||die "canoot\n";
9  open(OUTFILE2,">$output2")||die "canoot\n";
10
11 #####
12     &preprocess;
13 open (INFILE2,$output)||die "cannot open $input1";
14     $/= " ";
15     $ct_scanout = 0;
16     while (<INFILE2>){
17         chomp;
18         $ct_scanout = 1 if (/apply\s*"grp[0-9]_unload"/);
19         $chain_test=1 if (/CHAIN_TEST/);
20
21 if (( /\t*chain\s+"chain([0-9])\"/) && ($chain_test)){
22     $chain_number = $1;
23     &cleanup;
24     $chain_input = (split /=/, $chain_input)[1];
25     $chain_input =~ tr/\//d;
26     SWITCH: {
27         $chain_number==1 && do {
28             @chain1 = split (//, $chain_input);
29             $scan_chain_length1 = @chain1; };
30         $chain_number==2 && do {
31             @chain2 = split (//, $chain_input);
32             $scan_chain_length2 = @chain2; };
33         $chain_number==3 && do {
34             @chain3 = split (//, $chain_input);
35             $scan_chain_length3 = @chain3; };
36         $chain_number==4 && do {
37             @chain4 = split (//, $chain_input);
38             $scan_chain_length4 = @chain4; };
39         $chain_number==5 && do {
40             @chain5 = split (//, $chain_input);
41             $scan_chain_length5 = @chain5; };
42         $chain_number==6 && do {
43             @chain6 = split (//, $chain_input);
44             $scan_chain_length6 = @chain6; };
45         $chain_number==7 && do {
46             @chain7 = split (//, $chain_input);
47             $scan_chain_length7 = @chain7;
48             &printout;
49         };
50     }#END SWITCH
51 }
52 } #end of While statement
53 sub printout {
54     if ($ct_scanout ){
55         for ($i=0;$i<$scan_chain_length3;$i++){
56             $chain1[$i] =~ s/0/L/g; $chain1[$i] =~ s/1/H/g;
57             $chain2[$i] =~ s/0/L/g; $chain2[$i] =~ s/1/H/g;
58             $chain3[$i] =~ s/0/L/g; $chain3[$i] =~ s/1/H/g;
59             $chain4[$i] =~ s/0/L/g; $chain4[$i] =~ s/1/H/g;
60             $chain5[$i] =~ s/0/L/g; $chain5[$i] =~ s/1/H/g;
61             $chain6[$i] =~ s/0/L/g; $chain6[$i] =~ s/1/H/g;
62             $chain7[$i] =~ s/0/L/g; $chain7[$i] =~ s/1/H/g;
63             print OUTFILE2 "\n(ct_so
64 $chain1[$i]$chain2[$i]$chain3[$i]$chain4[$i]$chain5[$i]$chain6[$i]$
chain7[$i]
65 )";

```

```
66                                     }
67         $ct_scanout=0;
68     }
69     elsif ($ct_scanout==0){
70         for ($i=0;$i<$scan_chain_length3;$i++){
71             $chain1[$i] =~ s/X/0/g; $chain2[$i] =~ s/X/0/g;
72             $chain3[$i] =~ s/X/0/g; $chain4[$i] =~ s/X/0/g;
73             $chain5[$i] =~ s/X/0/g; $chain6[$i] =~ s/X/0/g;
74             $chain7[$i] =~ s/X/0/g;
75             print OUTFILE2 "\n(ct_si $ct_si{tdi}
76 $chain1[$i]$chain2[$i]$chain3[$i]$chain4[$i]$chain5[$i]$chain6[$i]$
chain7[$i]
77 )";
78         }
79     }
80 }
81 sub cleanup{
82     s/^\s+|\s*\n+$/g;
83     tr/\t //d;
84     s/\n//g;
85     s/\\//g;
86 }
87 sub preprocess{
88     while (<INFILE>){
89         chomp;
90         s/$//g if (/apply/);
91         print OUTFILE ("$_\n");
92         last if ( /^SCAN_CELLS/);
93     }
94     close OUTFILE;
95 }
```