```
     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      $chain_input = (split /=/,$_)[1];
    25      $chain_input =~ tr/\"//d;
    26      $chain[$chain_number] = [split //, $chain_input];
    27      &printout if $chain_number == 7;
    28    }
    29  }
    30
    31  sub printout {
    32    if ($ct_scanout ){
    33      for ($i=0;$i<@{$chain[3]};$i++){
    34        for (@chain) {
    35          $_->[$i] =~ s/0/L/g;
    36          $_->[$i] =~ s/1/H/g;
    37        }
    38        my @chars = map $_->[$i], @chain;
    39        print OUTFILE2 "\n(ct_so\n", join("", @chars), "\n )";
    40      }
    41      $ct_scanout=0;
    42    } elsif ($ct_scanout==0) {
    43      for ($i=0;$i<@{$chain[3]};$i++) {
    44        for (@chain) {
    45          $_->[$i] =~ s/X/0/g;
    46        }
    47        my @chars = map $_->[$i], @chain;
    48        print OUTFILE2 "\n(ct_si  $ct_si{tdi}\n", join("", @chars), "
\n )";
    49      }
    50    }
    51  }
    52
    53  sub cleanup {
    54    s/^\s+|\s*\n+$//g;
    55    tr/\t  //d;
    56    s/\n//g;
    57    s/\\//g;
    58  }
    59
    60  sub preprocess {
    61    while (<INFILE>){
    62      chomp;
    63      s/$/;/g if (/apply/);
    64      print OUTFILE ("$_\n");
    65      last if ( /^SCAN_CELLS/);
```

```
66     }
67     close OUTFILE;
68   }
```