```
Compiler version 0-2018.09-SP2-3_Full64; Runtime version 0-2018.09-SP2-3_Full64; Dec 6 22:56 2019
In Order Sequence (1,2,3,4,5,6):
   0: inorder = 1, count = 000
  15: inorder = 1, count = 001
  25: inorder = 1, count = 010
  35: inorder = 1, count = 011
  45: inorder = 1, count = 100
  55: inorder = 1, count = 101
  65: inorder = 1, count = 110
 85: inorder = 1, count = 001
95: inorder = 1, count = 010
 105: inorder = 1, count = 011
 105: inorder = 1, count = 100
125: inorder = 1, count = 101
135: inorder = 1, count = 110
Out of Order Sequence (4,2,5,3,6,1):
150: inorder = 0, count = 110
 155: inorder = 0, count = 001
 165: inorder = 0, count = 100
 175: inorder = 0, count = 010
 185: inorder = 0, count = 101
 195: inorder = 0, count = 011
 205: inorder = 0, count = 110
 215: inorder = 0, count = 001
 225: inorder = 0, count = 100
 235: inorder = 0, count = 010
 245: inorder = 0, count = 101
 255: inorder = 0, count = 011
 265: inorder = 0, count = 110
 275: inorder = 0, count = 001
 285: inorder = 0, count = 100
 295: inorder = 0, count = 010
 300: inorder = 1, count = 010
 305: inorder = 1, count = 011
$finish called from file "counter_tb.v", line 35.
$finish at simulation time
                                                310
            VCS Simulation
                                             Report
Time: 310
CPU Time:
                                       Data structure size:
                0.290 seconds;
                                                                 0.0Mb
Fri Dec 6 22:56:54 2019
```

Step by step follow specific the Project sheet, the result as binary number start at 000 to 110 then back to 000. I got one problem that there is a repeat of a sequence even after the inorder has changed from 0 to 1 or 1 to 0.