```
$ ./multiplexer
VCD info: dumpfile multiplexer.vcd opened for output.
A0 A1
      | I0 I1 I2 I3 |
                        Out
 0
    0
          x
             х
                 х
                    х
                           х
 0
    0
          0
                           0
             х
                 х
                    Х
    0
          1
                           1
             Х
                Х
                    Х
 1
    0
             0
                           0
          Х
                 Х
                    Х
 1
    0 I
             1
                           1
                 х
                    Х
          Х
 0
    1
                           0
          х
             Х
                 0
                    Х
 0
    1
                1
                           1
          х
             Х
                    хI
 1
    1
                    0
                           0
          х
             х
                 х
 1
    1
          Х
             х
                 х
                    1
                           1
$ ./decoder
VCD info: dumpfile decoder.vcd opened for output.
En A0 A1 | 00 01 02 03 | Expected Output
                      0 | All false
   0
      0 I
            0
               0
                   0
                      0 | All false
   1
      0 |
            0
               0
                   0
                      0 | All false
0
   0
      1
            0
                   0
               0
                      0 | All false
   1
      1
0
            0
               0
                  0
1
   0
      0
            1
               0
                   0
                      0 | 00 Only
                      0 | 01 Only
1
   1
      0
            0
               1
                   0
1
   0
               0
                   1
                      0 | 02 Only
      1
            0
1
                   0
                      1
   1
      1 I
            0
                          03 Only
$ ./adder
VCD info: dumpfile adder.vcd opened for output.
       Cin I
               S Cout
 Α
               0
 0
    0
          0
    0
 1
          0
               1
                     0
 0
    1
          0
               1
                     0
 1
    1
          0
               0
                     1
          1
 0
    0
               1
                     0
 1
    0
          1
               0
                     1
                     1
 0
    1
          1
               0
          1
                1
                     1
```