Computer Organization and Architecture

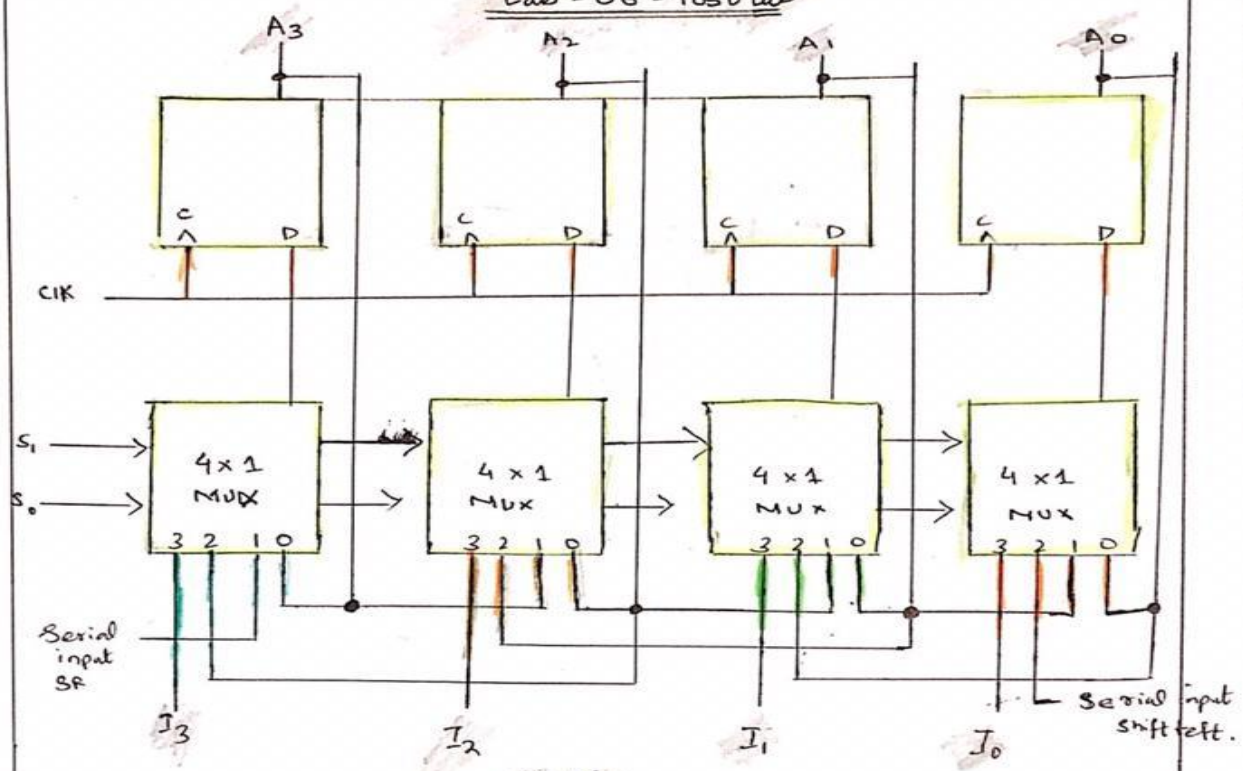
Post-Lab

Lab 06

Group Members Name & Reg #:	**Muhammad Haris Irfan** **(FA18-BCE-090)**
Class	Computer Organization and Architecture CPE343(**BCE-5B**)
Instructor's Name	Dr. Adeel Israr

Postlab

Lab - 06 - Post Lab



Code:

```
module    Universal SE (I[3:0], select [1:0], A [3:0], clk, se, sl);
    input   [3:0] I;
    input   clk;
    input   [1:0] select;
    input   se, sl;
    output  [3:0] A;
    wire    m1, m2, m3, m4;
    wire    qp1, qp2, qp3, qp4;

  mux  m1 (A[0], A[1], se, I[0], m1, select);
  DFF  d1 (m1, clk, A[0], qp1);
  mux  m2 (A[1], A[2], A[0], I[1], m2, select);
  DFF  d2 (m2, clk, A[1], qp2);
  mux  m3 (A[2], A[3], A[1], I[2], m3, select);
  DFF  d3 (m3, clk, A[2], qp3);

  mux  m4 (A[3], sl, A[2], I[3], m4, select);
  DFF  d4 (m4, clk, A[3], qp4);

end module.
```

Output Waveform: