

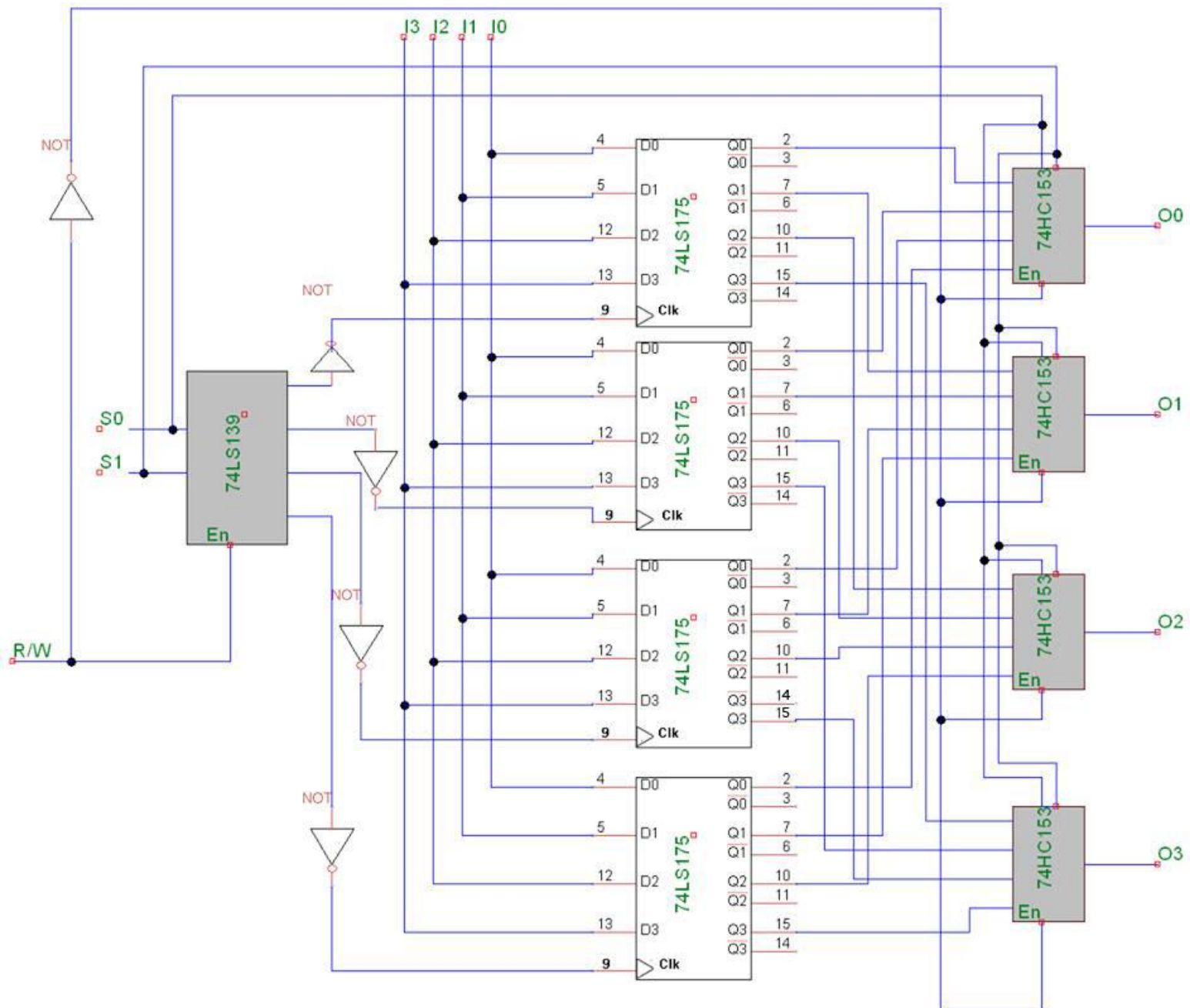
# Digital Design Project

## QUESTION 1a

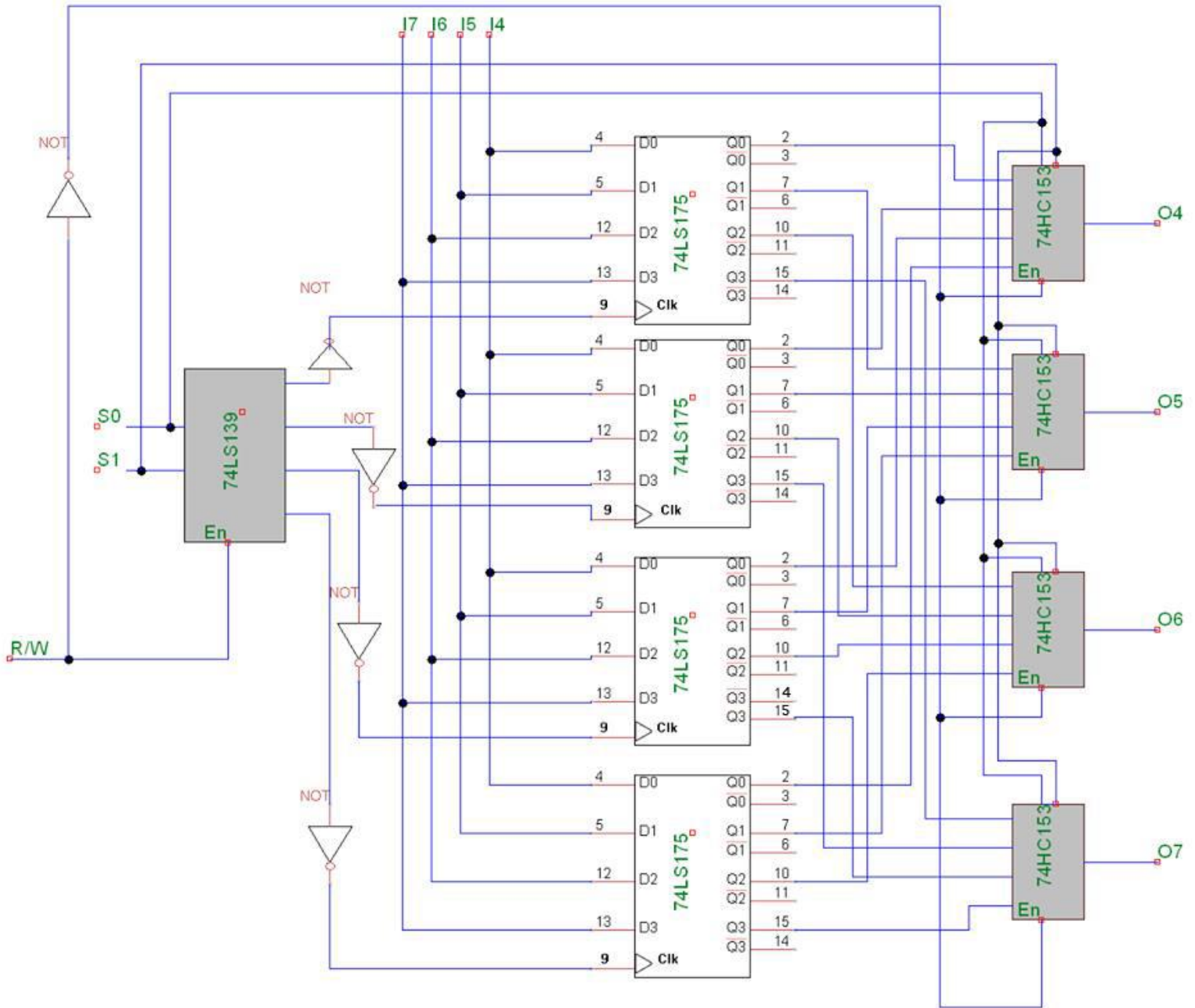
ASHISH BAGHUDANA	2011B1A7575G
ANSHU AVIRAL	2011B5A7289G
MIHIR KAKRAMBE	2011B5A7437G
SAJIDUR RAHAMAN	2011B5A7496G
B.N.M. PREETAM	2011B5A7501G
ABHISHEK DESAI	2012A7B4065G

## Two 4X4 Memory Blocks

Circuit Diagram:



Block – 1



Block – 2

## ICs used (Total circuit):

8 X 74LS175                      Quad-D flip-flops (Pos. edge triggered)

4 X 74HC153                      Dual 4 to 1 multiplexer

1 X 74LS139                      2 X4 Decoder

1X 7404                          Hex inverter

**(Note:** Decoder, multiplexer and inverter ICs are common in both the blocks.  
Separate D flip-flop ICs are used for different blocks.)