Recitation#9: Mux Application

When: March 26 at 2:00 pm

a) Given the function Z = B'C + A'BD + AB', fill in the truth-table below.

A	B	C	D	Z
0	0	0	0	0
0	0	0	1	0
0	0	1	0	1
0	0	1	1	1
0	1	0	0	0
0	1	0	1	1
0	1	1	0	0
0	1	1	1	1
1	0	0	0	1
1	0	0	1	1
1	0	1	0	1
1	0	1	1	1
1	1	0	0	0
1	1	0	1	0
1	1	1	0	0
1	1	1	1	0

b) Given the truth table of part (a), implement Z using a single 16:1 multiplexer shown below. Make sure to clearly label all inputs and outputs.