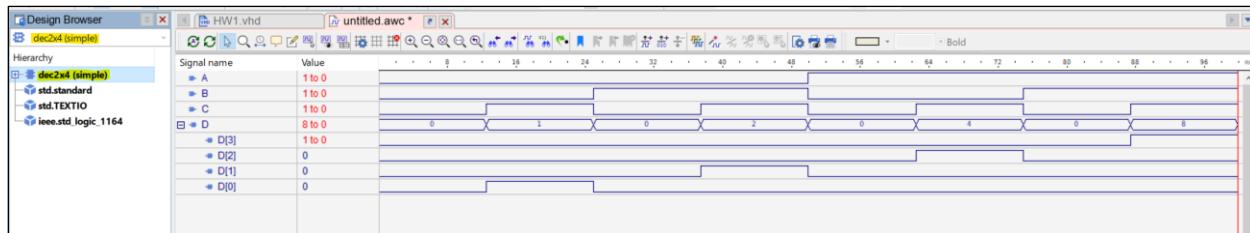


ENCS533

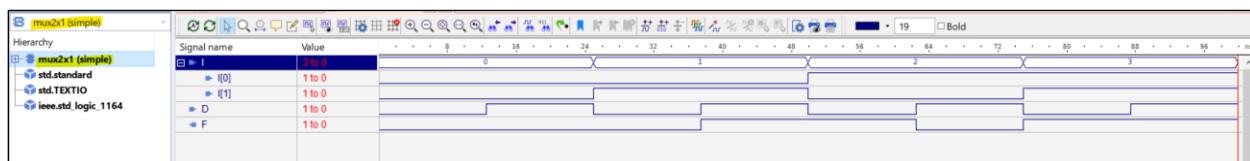
HW1 Simulations

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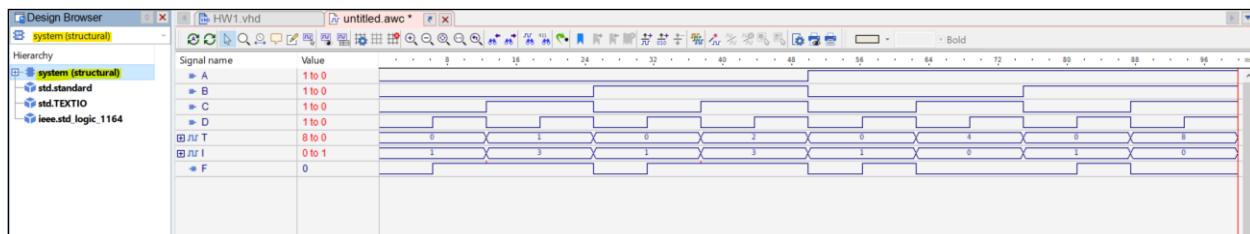
DECODER 2X4 WITH ENABLE



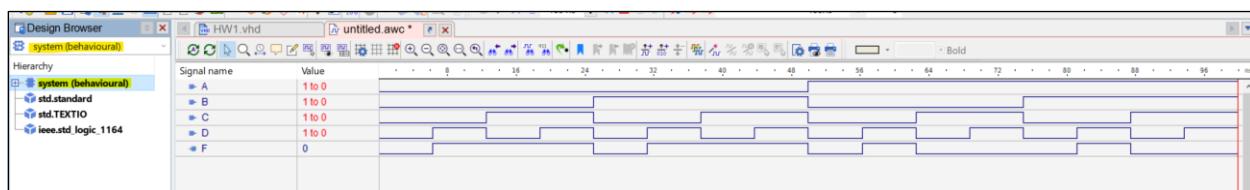
MUX 2X1



Simulation Of Structural Description for the Circuit



Simulation Of Behavioural Description for the Circuit



Tarek Shannak
1181404

HW 1 ENCS533

Truth Table:

A	B	C	D	F
0	0	0	0	0
0	0	0	1	1
0	0	1	0	1
0	0	1	1	1
0	1	0	0	0
0	1	0	1	1
0	1	1	0	1
1	0	0	0	0
1	0	0	1	1
1	0	1	0	0
1	1	0	0	0
1	1	0	1	1
1	1	1	0	0
1	1	1	1	1

AB\CD	00	01	11	10
00	0	1	1	1
01	0	1	1	1
11	0	1	0	0
10	0	1	0	0

$$\begin{aligned} F &= \overline{C}D + \overline{A}D + \overline{A}C \\ &= \overline{C}D + C\overline{A} \end{aligned}$$