Truth table :

x4	x3	x2	x1	f
0	0	0	0	0
0	0	0	1	0
0	0	1	0	0
0	0	1	1	0
0	1	0	0	0
0	1	0	1	0
0	1	1	0	0
0	1	1	1	0
1	0	0	0	1
1	0	0	1	1
1	0	1	0	1
1	0	1	1	0
1	1	0	0	0
1	1	0	1	0
1	1	1	0	0
1	1	1	1	0

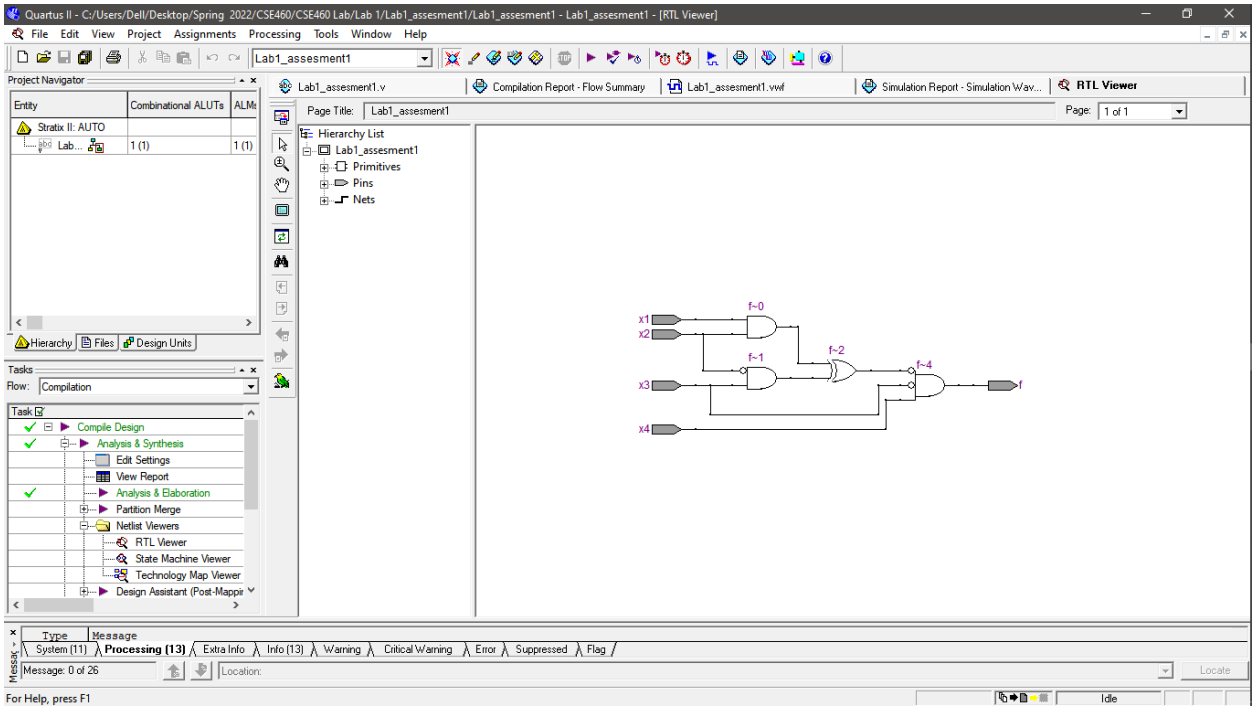
Code :

```
module     Lab1_assesment1 (x1,x2,x3,x4,f);

input x1,x2,x3,x4;
output     f;

assign  f= ( ( ~((x1 & x2) ^ ( ~x2 & x3))) & ( ~x3 & x4));

endmodule
```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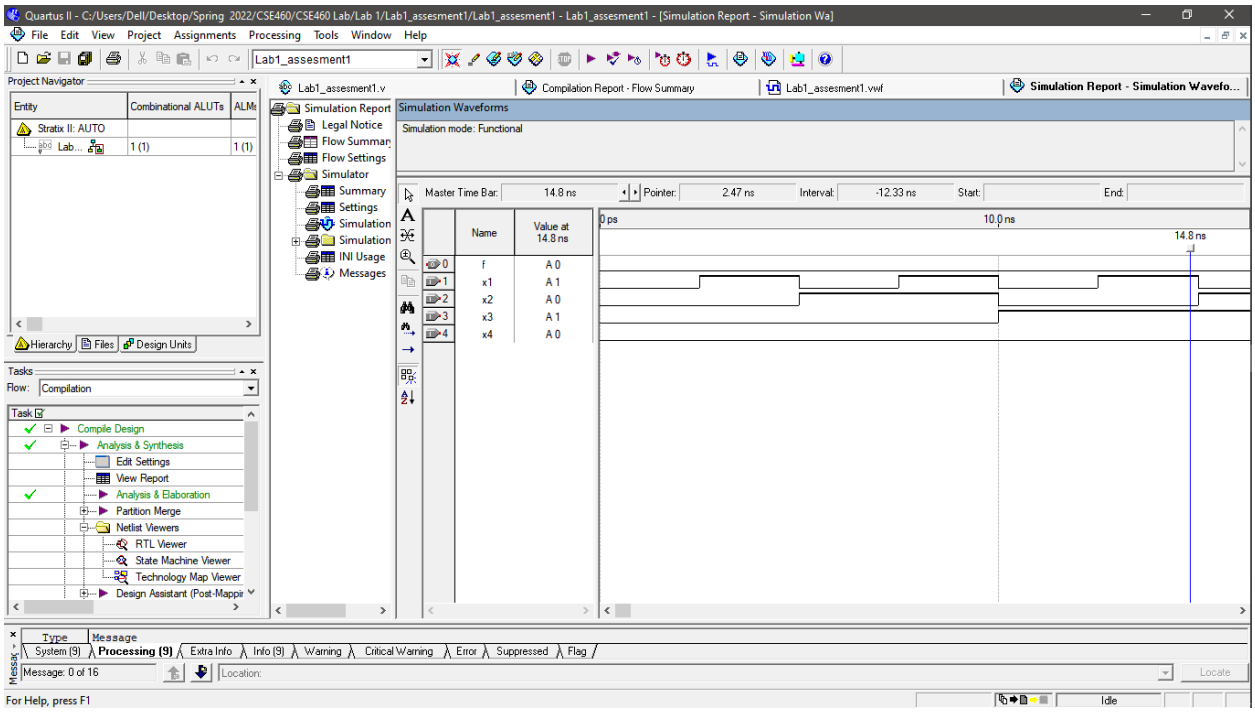
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Simulation mode: Functional
Master Time Bar: 14.8 ns
Pointer: 2.47 ns
Interval: -12.33 ns
Start:
End:
Name
Value at 14.8 ns
0 f A 0
1 x1 A 1
2 x2 A 0
3 x3 A 1
4 x4 A 0
0 ps
10.0 ns
14.8 ns
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