Assignment 1

Q1)
Code:

```
1  module XNOR(input A, B, output C);
2
3
4  assign C = ~(A ^ B);
5
6  endmodule
```

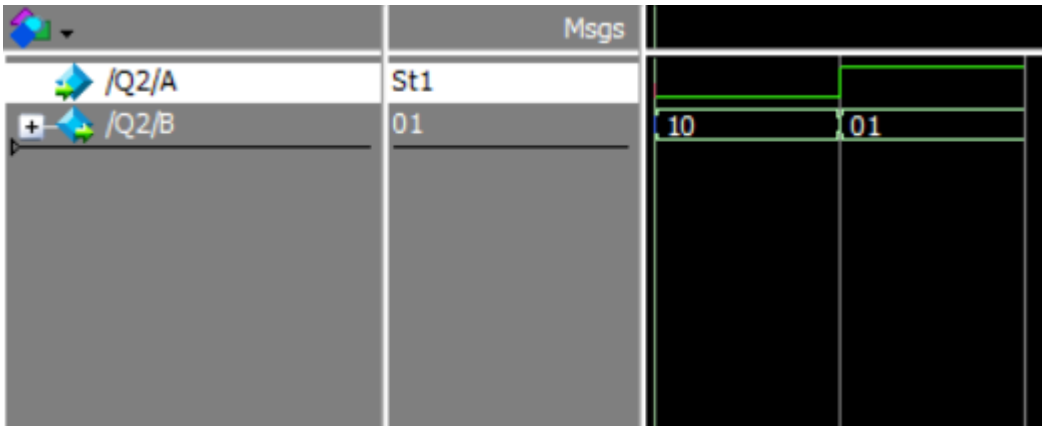
Waveform:

Function: XNOR

Q2)
Code:

```
1  module Q2 (input A, output[1:0] B);
2
3
4  assign B = (A == 1)? 2'd1 : 2'd2;
5
6  endmodule
```

Waveform:



Q3)

```
1  module Q3(input[1:0] A,input C, output B );
2
3  assign B = (A == 2'b01) ? C :(A == 2'b10) ? ~C : 1'b0;
4
5  endmodule
```

Waveform: