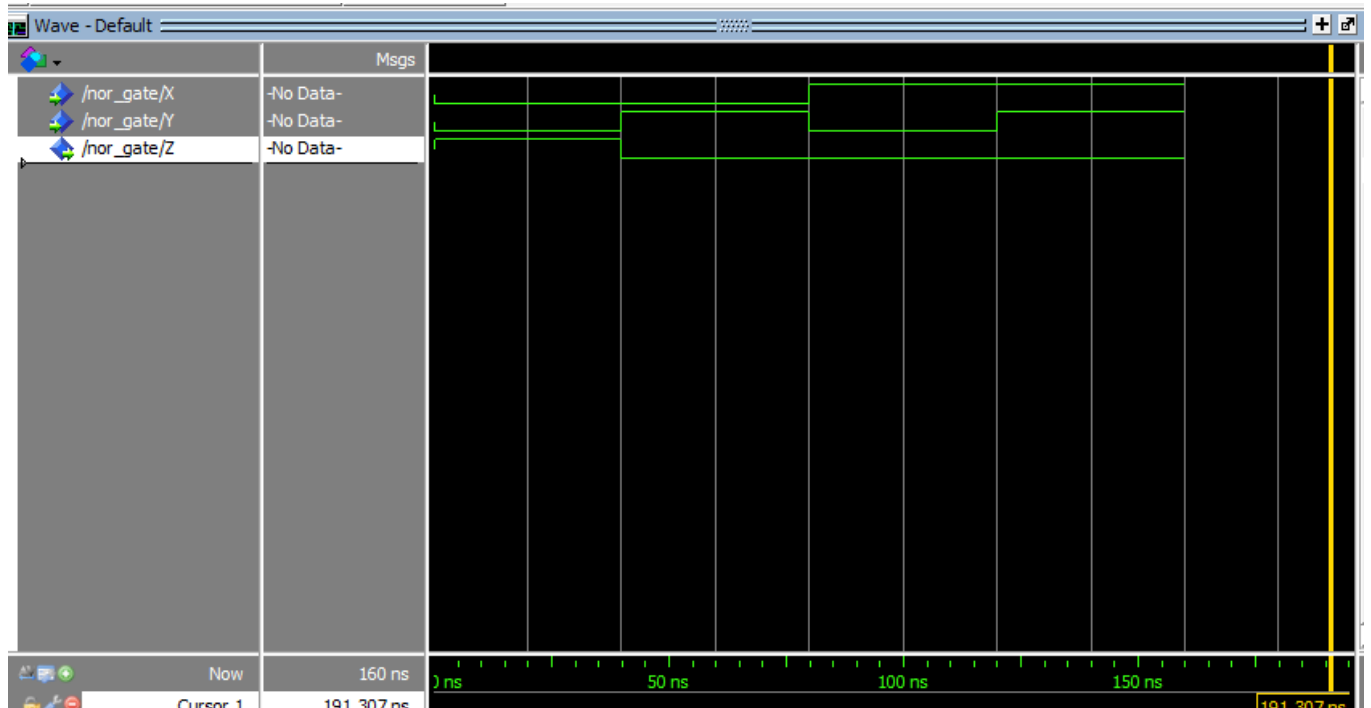


1.LOGIC GATES

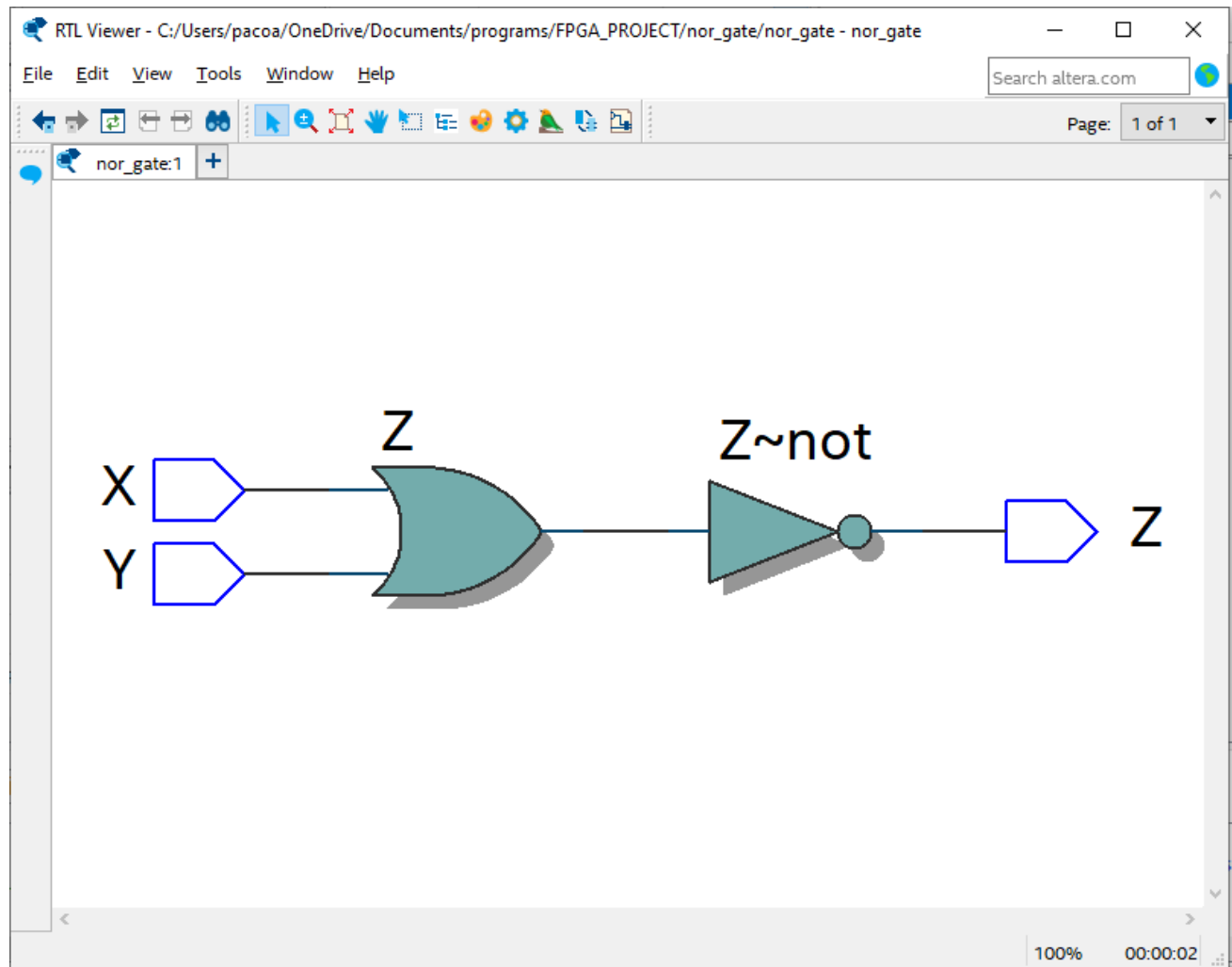
AIM: Write a VHDL code for all the logic gates.

#5- TITLE: NOR gate

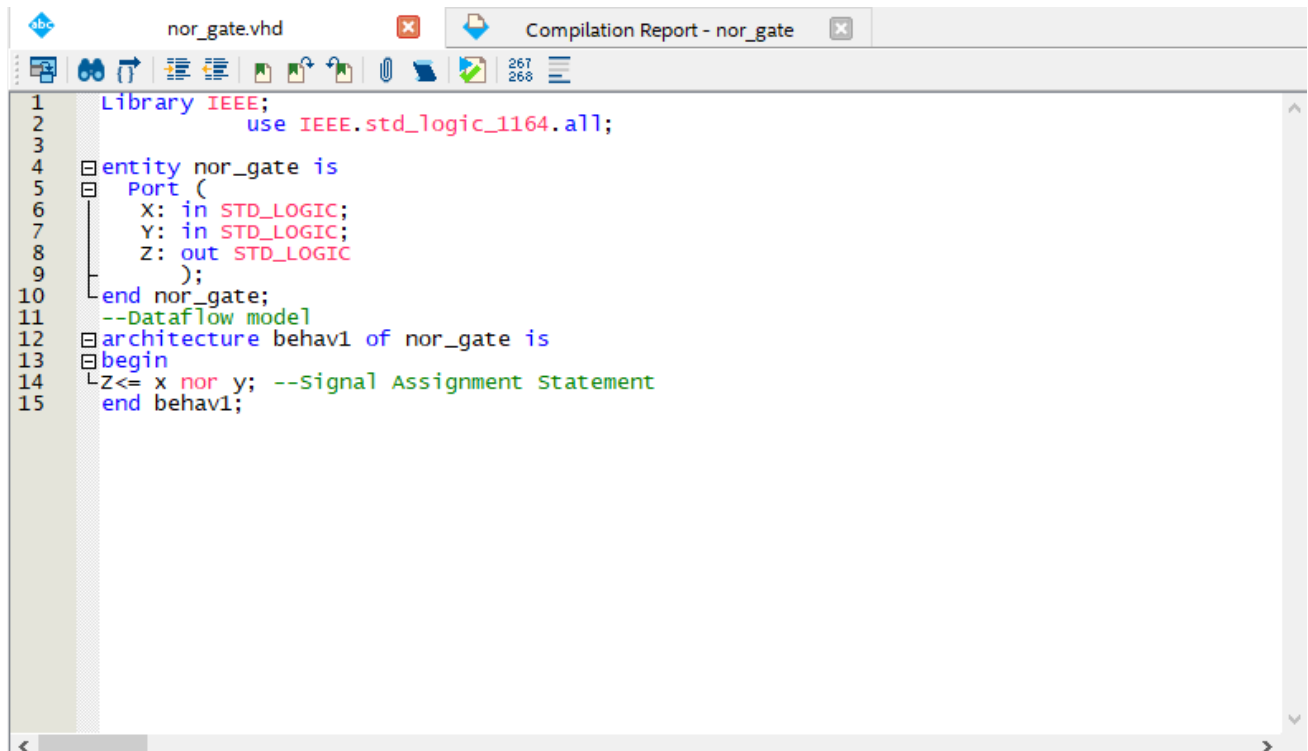
OUTPUT WAVE FORM:



RTL VIEW:



CODE:



The screenshot shows a VHDL code editor window with the file name 'nor_gate.vhd'. The code defines a NOR gate entity and its behavior. The code is as follows:

```
1  Library IEEE;
2      use IEEE.std_logic_1164.all;
3
4  entity nor_gate is
5  port (
6      X: in STD_LOGIC;
7      Y: in STD_LOGIC;
8      Z: out STD_LOGIC
9  );
10 end nor_gate;
11 --Dataflow model
12 architecture behav1 of nor_gate is
13 begin
14     Z<= x nor y; --Signal Assignment Statement
15 end behav1;
```