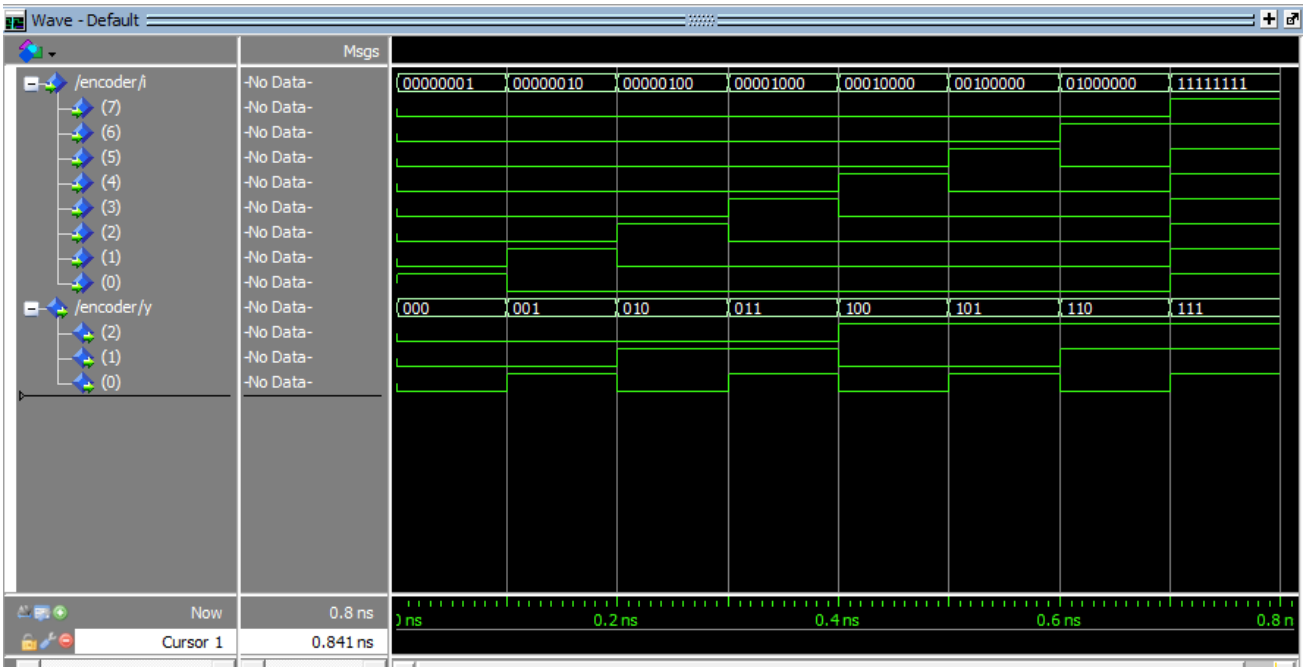
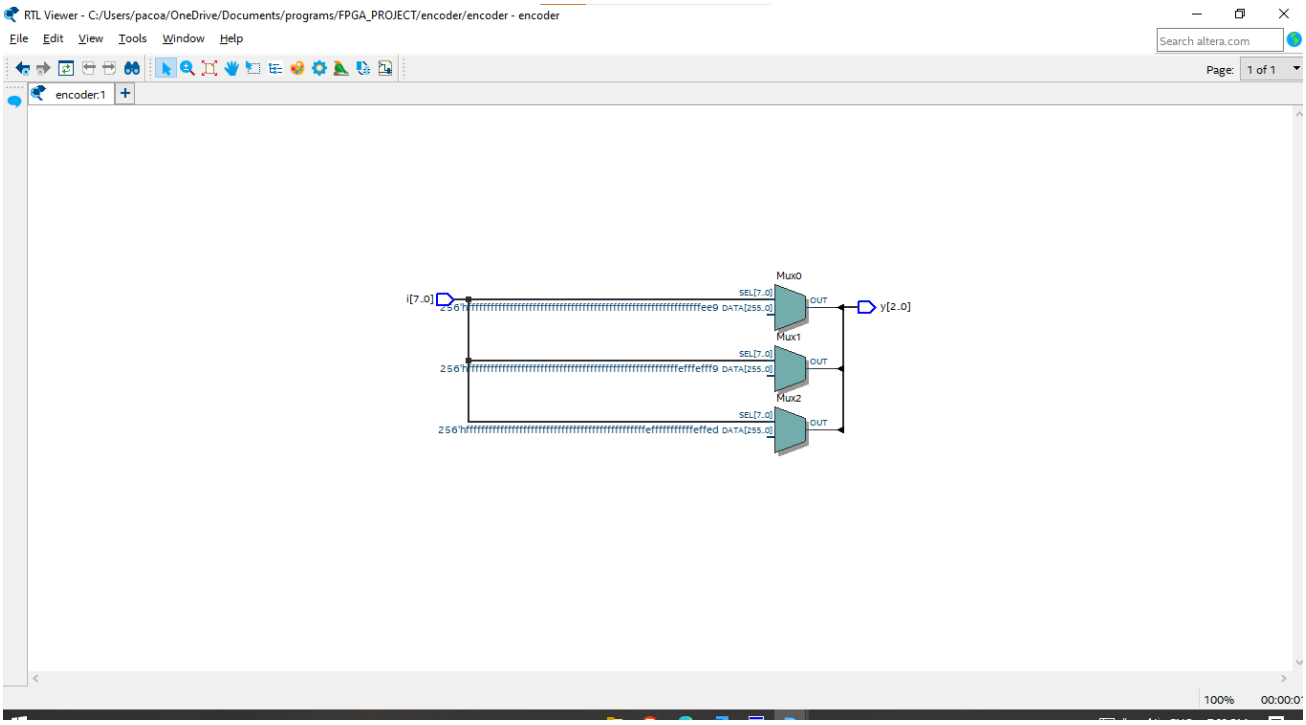
PACO, ARMIN R.
BSCpE – 3A

TITLE: ENCODER WITHOUT PRIORITY (8:3)

OUTPUT WAVE FORM:



RTL VIEW:



CODE:

encoder.vhd | Compilation Report - encoder

```
1   library IEEE;
2   use IEEE.STD_LOGIC_1164.ALL;
3   use IEEE.STD_LOGIC_ARITH.ALL;
4   use IEEE.STD_LOGIC_UNSIGNED.ALL;
5
6   entity encoder is
7       Port (
8           i : in STD_LOGIC_VECTOR (7 downto 0);
9           y : out STD_LOGIC_VECTOR (2 downto 0)
10      );
11  end encoder;
12
13  architecture behav of encoder is
14  begin
15      -- Using the 'with select' statement
16      with i select
17          y <= "000" when "00000001",
18               "001" when "00000010",
19               "010" when "00000100",
20               "011" when "00001000",
21               "100" when "00010000",
22               "101" when "00100000",
23               "110" when "01000000",
24               "111" when others;
25  end behav;
26
```