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C.Y.S.: BSCpE – 3A

The **CODE:**

```
library IEEE;

use IEEE.STD_LOGIC_1164.ALL;

use IEEE.STD_LOGIC_ARITH.ALL;

use IEEE.STD_LOGIC_UNSIGNED.ALL;

entity en_wout is
    Port ( i : in  STD_LOGIC_VECTOR (7 downto 0);
          y : out STD_LOGIC_VECTOR (2 downto 0));
end en_wout;

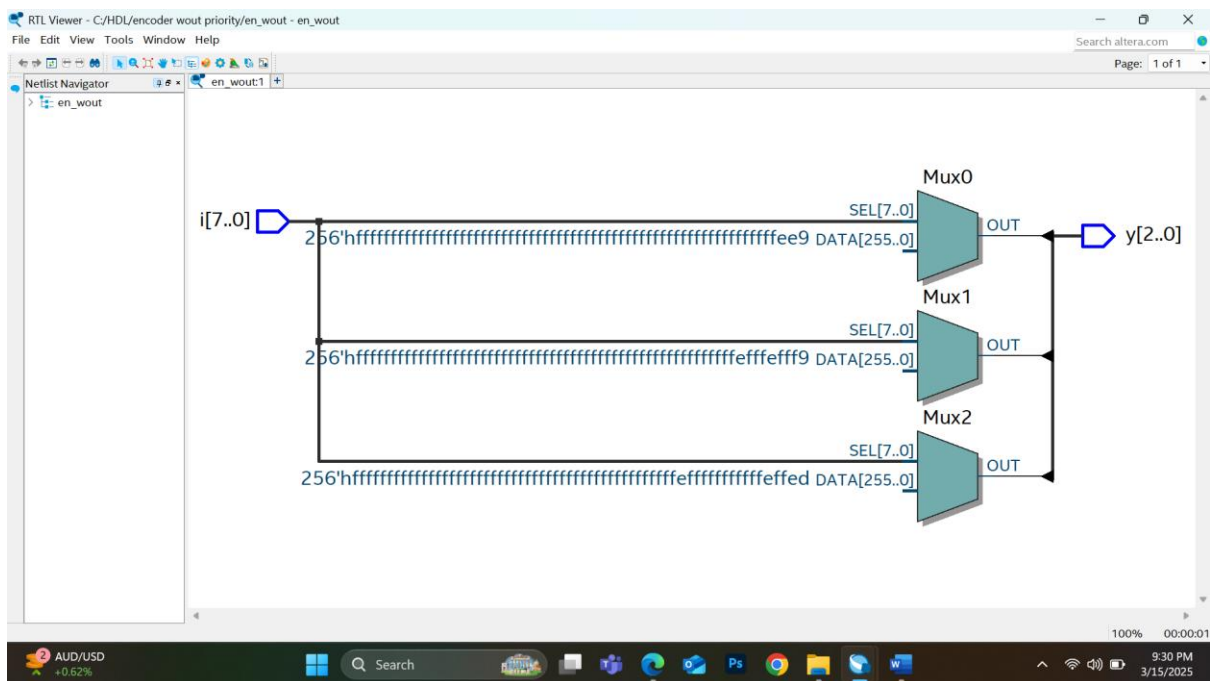
architecture Behavioral of en_wout is
begin
    with i select
        y<="000" when "00000001",
        "001" when "00000010",
        "010" when "00000100",
        "011" when "00001000",
        "100" when "00010000",
        "101" when "00100000",
        "110" when "01000000",
        "111" when others;
end Behavioral;
```

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2  use IEEE.STD_LOGIC_1164.ALL;
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5  entity en_wout is
6  Port ( i : in  STD_LOGIC_VECTOR (7 downto 0);
7        y : out STD_LOGIC_VECTOR (2 downto 0));
8  end en_wout;
9  architecture Behavioral of en_wout is
10 begin
11   with i select
12   y<="000" when "00000001",
13   "001" when "00000010",
14   "010" when "00000100",
15   "011" when "00001000",
16   "100" when "00010000",
17   "101" when "00100000",
18   "110" when "01000000",
19   "111" when others;
20 end Behavioral;

```

The LOGIC GATE:



The WAVEFORM:

