

PLAZA, ELMO L.

5. VHDL CODE FOR ENCODER WITHOUT PRIORITY (4:2):

CODE:

```
library IEEE;
use IEEE.STD_LOGIC_1164.all;

entity Encoder_wo_prio is
    port(
        a : in STD_LOGIC_VECTOR(3 downto 0);
        b : out STD_LOGIC_VECTOR(1 downto 0)
    );
end Encoder_wo_prio;
architecture bhv of Encoder_wo_prio is
begin
    process(a)
    begin
        if (a = (not "1000")) then
            b <= "00";
        elsif (a = (not "0100")) then
            b <= "01";
        elsif (a = (not "0010")) then
            b <= "10";
        elsif (a = (not "0001")) then
            b <= "11";
        else
            b <= "ZZ";
        end if;
    end process;
end bhv;
```

OUTPUT :

