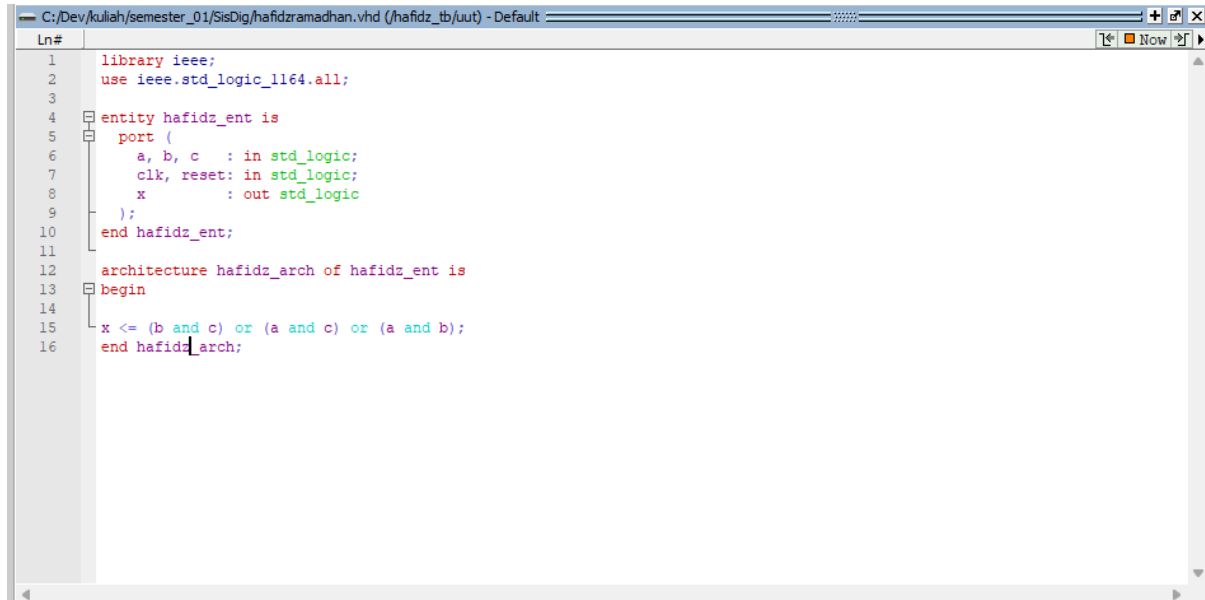


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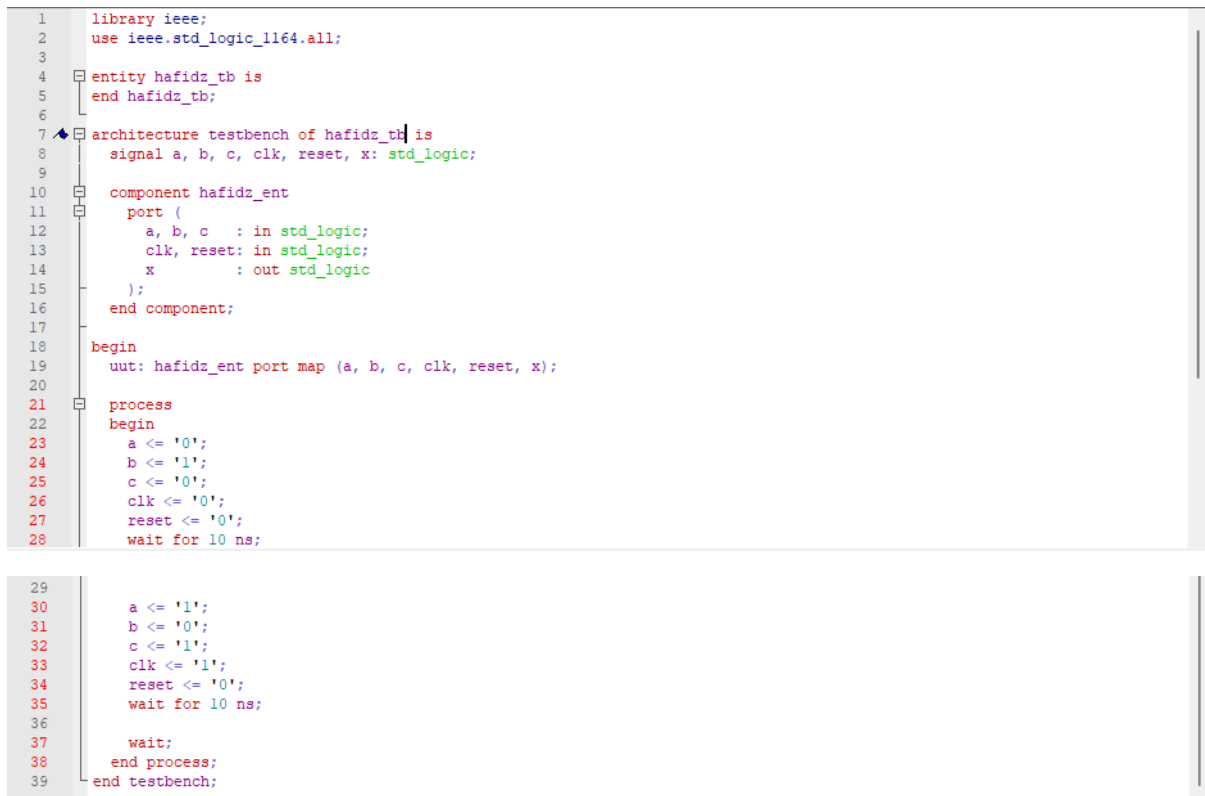
Nama : Hafidz Ramadhan Ghiffari

Screenshot vhdI



```
1 library ieee;
2 use ieee.std_logic_1164.all;
3
4 entity hafidz_ent is
5   port (
6     a, b, c : in std_logic;
7     clk, reset: in std_logic;
8     x       : out std_logic
9   );
10 end hafidz_ent;
11
12 architecture hafidz_arch of hafidz_ent is
13 begin
14   x <= (b and c) or (a and c) or (a and b);
15 end hafidz_arch;
```

Screenshot testbench



```
1 library ieee;
2 use ieee.std_logic_1164.all;
3
4 entity hafidz_tb is
5 end hafidz_tb;
6
7 architecture testbench of hafidz_tb is
8   signal a, b, c, clk, reset, x: std_logic;
9
10   component hafidz_ent
11     port (
12       a, b, c : in std_logic;
13       clk, reset: in std_logic;
14       x       : out std_logic
15     );
16   end component;
17
18 begin
19   uut: hafidz_ent port map (a, b, c, clk, reset, x);
20
21   process
22   begin
23     a <= '0';
24     b <= '1';
25     c <= '0';
26     clk <= '0';
27     reset <= '0';
28     wait for 10 ns;
29
30     a <= '1';
31     b <= '0';
32     c <= '1';
33     clk <= '1';
34     reset <= '0';
35     wait for 10 ns;
36
37     wait;
38   end process;
39 end testbench;
```

Screenshot wave

