

Binary to gray (USING EXOR GATES)

```
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 bin_gray_exor_gate is
7  port(
8      b: in std_logic_vector(3 downto 0); -- Binary Input
9      g: out std_logic_vector(3 downto 0) -- Gray Output
10 );
11 end bin_gray_exor_gate;
12
13 architecture behavioral of bin_gray_exor_gate is
14 begin
15     g(3) <= b(3);
16     g(2) <= b(3) xor b(2);
17     g(1) <= b(2) xor b(1);
18     g(0) <= b(1) xor b(0);
19 end behavioral;
20
```

