

```
library IEEE;
use IEEE.std_logic_1164.all;
entity fulladder is
  port(A,B,C : in std_logic; sum,carry :out std_logic);
end fulladder;
-- Architecture definition
architecture fulladderLogic of fulladder is
  signal X,Y,Z: std_logic;
  begin
    X <= A XOR B;
    sum <= X XOR C;
    Y <= X and C;
    Z <= A and B;
    carry<= Y OR Z;
  end fulladderLogic;
```