

MUX Variation

```
library ieee;
use ieee.std_logic_1164.all;
use ieee.std_logic_arith.all;

entity mux_var is
port (
    a_i      : in std_logic;
    b_i      : in std_logic;
    c_i      : in std_logic;
    sel_i    : in std_logic_vector(1 downto 0);
    y_o      : out std_logic
);
end entity;

architecture rtl of mux_var is
begin
mux_var: process(a_i, b_i, c_i, sel_i)
begin
    if(sel_i = "00")then
        y_o <= a_i;
    end if;
    if(sel_i = "01")then
        y_o <= b_i;
    end if;
    if(sel_i = "10")then
        y_o <= c_i;
    end if;
end process;
end rtl;
```