

```
library ieee;
use ieee.std_logic_1164.all;
entity mux4_1 is
    port(
        A,B,C,D: in std_logic;
        s0,s1: in std_logic;
        z: out std_logic);
end mux4_1;

architecture mux4_1_logic of mux4_1 is
    component mux_1
    port(
        A,B: in std_logic;
        S: in std_logic;
        Y: out std_logic);
    end component;
    signal temp1,temp2 : std_logic;

begin
    u1: mux_1 port map(A,B,s0,temp1);
    u2: mux_1 port map(C,D,s0,temp2);
    u3: mux_1 port map(temp1,temp2,s1,z);
end mux4_1_logic;
```