library IEEE;

use IEEE.STD\_LOGIC\_1164.ALL;

-- Uncomment the following library declaration if using

-- arithmetic functions with Signed or Unsigned values

--use IEEE.NUMERIC\_STD.ALL;

-- Uncomment the following library declaration if instantiating

-- any Xilinx primitives in this code.

--library UNISIM;

--use UNISIM.VComponents.all;

entity muxnew2 is

Port ( x : in STD\_LOGIC\_VECTOR (3 downto 0);

sel : in STD\_LOGIC\_VECTOR (1 downto 0);

y : out STD\_LOGIC);

end muxnew2;

architecture Behavioral of muxnew2 is

begin

process(x,sel)

variable z:std\_logic;

begin

if(sel="00")then

z:=x(0);

elsif(sel="01")then

z:=x(1);

elsif(sel="10")then

z:=x(2);

elsif(sel="11")then

z:=x(3);

end if;

y<=z;

end process;

end Behavioral;

LIBRARY ieee;

USE ieee.std\_logic\_1164.ALL;

-- Uncomment the following library declaration if using

-- arithmetic functions with Signed or Unsigned values

--USE ieee.numeric\_std.ALL;

ENTITY muxnewtest2 IS

END muxnewtest2;

ARCHITECTURE behavior OF muxnewtest2 IS

-- Component Declaration for the Unit Under Test (UUT)

COMPONENT muxnew2

PORT(

x : IN std\_logic\_vector(3 downto 0);

sel : IN std\_logic\_vector(1 downto 0);

y : OUT std\_logic

);

END COMPONENT;

--Inputs

signal x : std\_logic\_vector(3 downto 0) := (others => '0');

signal sel : std\_logic\_vector(1 downto 0) := (others => '0');

--Outputs

signal y : std\_logic;

-- No clocks detected in port list. Replace <clock> below with

-- appropriate port name

--constant <clock>\_period : time := 10 ns;

BEGIN

-- Instantiate the Unit Under Test (UUT)

uut: muxnew2 PORT MAP (

x => x,

sel => sel,

y => y

);

-- Clock process definitions

--<clock>\_process :process

-- begin

--<clock> <= '0';

--wait for <clock>\_period/2;

--<clock> <= '1';

--wait for <clock>\_period/2;

-- process;

-- Stimulus process

stim\_proc: process

begin

-- hold reset state for 100 ns.

x<="1010";

sel<="00";

wait for 100 ns;

sel<="01";

wait for 100 ns;

sel<="10";

wait for 100 ns;

sel<="11";

wait for 100 ns;

-- wait for <clock>\_period\*10;

-- insert stimulus here

wait;

end process;

END;

