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 votetb IS

END votetb;

ARCHITECTURE behavior OF votetb IS

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

COMPONENT VotingMachine1

PORT(

clk : IN std\_logic;

reset : IN std\_logic;

party1 : IN std\_logic;

party2 : IN std\_logic;

party3 : IN std\_logic;

select\_party : IN std\_logic;

count1\_op : OUT std\_logic\_vector(5 downto 0);

count2\_op : OUT std\_logic\_vector(5 downto 0);

count3\_op : OUT std\_logic\_vector(5 downto 0)

);

END COMPONENT;

--Inputs

signal clk : std\_logic := '0';

signal reset : std\_logic := '0';

signal party1 : std\_logic := '0';

signal party2 : std\_logic := '0';

signal party3 : std\_logic := '0';

signal select\_party : std\_logic := '0';

--Outputs

signal count1\_op : std\_logic\_vector(5 downto 0);

signal count2\_op : std\_logic\_vector(5 downto 0);

signal count3\_op : std\_logic\_vector(5 downto 0);

-- Clock period definitions

constant clk\_period : time := 5 ns;

BEGIN

-- Instantiate the Unit Under Test (UUT)

uut: VotingMachine1 PORT MAP (

clk => clk,

reset => reset,

party1 => party1,

party2 => party2,

party3 => party3,

select\_party => select\_party,

count1\_op => count1\_op,

count2\_op => count2\_op,

count3\_op => count3\_op

);

-- Clock process definitions

clk\_process :process

begin

clk <= '0';

wait for clk\_period/2;

clk <= '1';

wait for clk\_period/2;

end process;

-- Stimulus process

stim\_proc: process

begin

-- hold reset state for 100 ns.

wait for 100 ns;

wait for clk\_period\*10;

reset<='1';

wait for 10 ns;

reset<='0';

party1<='0';

party2<='0';

party3<='0';

party1<='1';

wait for 10 ns;

party1<='0';

wait for 10 ns;

select\_party<='1';

wait for 10 ns;

select\_party<='0';

wait for 10 ns;

party2<='1';

wait for 10 ns;

party2<='0';

wait for 10 ns;

select\_party<='1';

wait for 10 ns;

select\_party<='0';

wait for 10 ns;

party2<='1';

wait for 10 ns;

party2<='0';

wait for 10 ns;

select\_party<='1';

wait for 10 ns;

select\_party<='0';

wait for 10 ns;

party1<='1';

wait for 10 ns;

party1<='0';

wait for 10 ns;

select\_party<='1';

wait for 10 ns;

select\_party<='0';

wait for 10 ns;

party1<='1';

wait for 10 ns;

party1<='0';

wait for 10 ns;

select\_party<='1';

wait for 10 ns;

select\_party<='0';

wait for 10 ns;

party3<='1';

wait for 10 ns;

party3<='0';

wait for 10 ns;

select\_party<='1';

wait for 10 ns;

select\_party<='0';

wait for 10 ns;

wait;

end process;

END;