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-- Company:
-- Engineer:
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-- Create Date: 14.12.2022 11:37:44
-- Design Name:
-- Module Name: muxvas_tb - Behavioral
-- Project Name:
-- Target Devices:
-- Tool Versions:
-- Description:
--
-- Dependencies:
--
-- Revision:
-- Revision 0.01 - File Created
-- Additional Comments:
--
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```

```
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 leaf cells in this code.
--library UNISIM;
--use UNISIM.VComponents.all;
```

```
entity muxvas_tb is
-- Port ( );
end muxvas_tb;
```

```
architecture Behavioral of muxvas_tb is
```

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

```
COMPONENT muxvas
PORT(
    I : IN std_logic_vector(7 downto 0);
    S : IN std_logic_vector(2 downto 0);
    Y : OUT std_logic
);
END COMPONENT;
```

```

--Inputs
signal I : std_logic_vector(7 downto 0) := (others => '0');
signal S : std_logic_vector(2 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: muxvas PORT MAP (
    I => I,
    S => S,
    Y => Y
);

-- Stimulus process
stim_proc: process
begin
-- hold reset state for 100 ns.
wait for 10 ns;

--wait for <clock>_period*10;

-- insert stimulus here
I <= "00000000";
S <= "001";
wait for 10ns;
I <= "00000001";
S <= "000";
wait for 10ns;
I <= "00000000";
S <= "001";
wait for 10ns;
I <= "00000010";
S <= "001";
wait for 10ns;
I <= "00000000";
S <= "001";
wait for 10ns;
I <= "00000100";
S <= "010";
wait for 10ns;
I <= "00000000";

```

```
S <= "010";
wait for 10ns;
I <= "00001000";
S <= "011";
wait for 10ns;
I <= "00010000";
S <= "100";
wait for 10ns;
I <= "00000000";
S <= "111";
wait for 10ns;
I <= "01000000";
S <= "110";
wait for 10ns;
I <= "10000000";
S <= "111";
```

```
wait;
end process;
```

```
end Behavioral;
```