

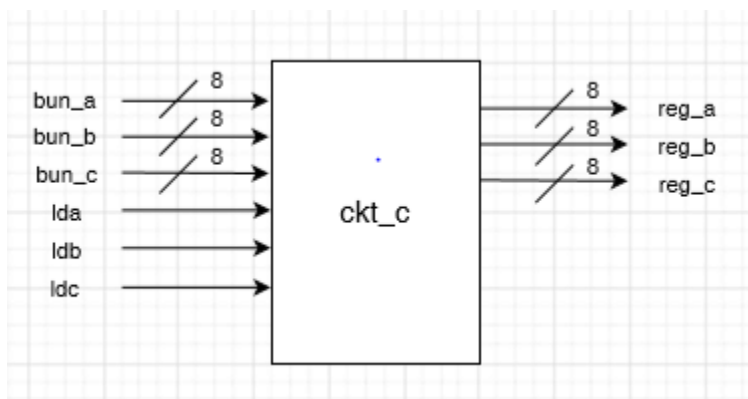
4B)

```

entity sys2 is
  port(input_w : in std_logic;
        a_data : in std_logic_vector(7 downto 0);
        b_data : in std_logic_vector(7 downto 0);
        clk : in std_logic;
        dat_4 : out std_logic_vector(7 downto 0);
        dat_5 : out std_logic_vector(3 downto 0));
end sys2;

```

5A)



6A)

```

entity ckt_a is
  port(J,K : in std_logic;
        CLK: in std_logic --missing semicolon
        Q : out std_logic;) --semicolon should be on outside parentheses
end ckt_a;

```

6B)

```

entity ckt_b is
  port(mr_fluffy : in std_logic_vector(15 downto 0);
        mux_ctrl : in std_logic_vector(3 downto 0);
        byte_out : out std_logic_vector(3 downto 0); --missing
        parentheses before semicolon
end ckt_b;

```