

```

module UPC(discounted, stolen, u, p, c, m);
    output logic discounted, stolen;
    input logic u, p, c, m;

    assign discounted = (u&p)|(p&c)|(u&c);
    assign stolen = (~p&~c&~m)|(u&~p&~m);
endmodule

module UPC_testbench();
    logic u, p, c, m;
    logic discounted, stolen;

    UPC dut(.discounted, .stolen, .u, .p, .c, .m);

    integer i;
    initial begin
        for (i = 0; i < 14; i++) begin
            {u, p, c, m} = i; #10;
        end
    end
endmodule

```