**reg**[3:0]DC1;

**always**@(SW[3:0]) **begin**

**case**(SW[3:0])

       4’b0000: DC1 <= 4’d4;

       4’b0001: DC1 <= 4’d3;

       4’b0010: DC1 <= 4’d3;

       4’b0011: DC1 <= 4’d2;

       4’b0100: DC1 <= 4’d3;

       4’b0101: DC1 <= 4’d2;

       4’b0110: DC1 <= 4’d2;

       4’b0111: DC1 <= 4’d1;

       4’b1000: DC1 <= 4’d3;

       4’b1001: DC1 <= 4’d2;

       4’b1010: DC1 <= 4’d2;

       4’b1011: DC1 <= 4’d1;

       4’b1100: DC1 <= 4’d2;

       4’b1101: DC1 <= 4’d1;

       4’b1110: DC1 <= 4’d1;

       4’b1111: DC1 <= 4’d0;

**endcase**

**end**