// Build a project to communicate a device with another device using SPI communication protocol.

/*__Criteria__:

1.If you press a switch1 in Master Device Led1 in Slave Device Should glow.

2.If you press a switch2 in Master Device Led2 in Slave Device Should glow.

*/

```
#include <xc.h>                                                    //include xc.h
#define _XTAL_FREQ 20000000                                        //define frequency of crystal oscillator
#define sw1 RB0                                                    //define RB0 as sw1
#define sw2 RB1                                                    //define RB1 as sw2
void main ()                                                       //start main()
{
   TRISC=0x10;                                                     //configure RC4 as input, RC3 & RC5 as output.
   TRISD=0x00;                                                     //configure PORTD as output
   SSPSTAT=0xC0;      //configure SSPSTAT to enable sample bit and set CKE clock edge to 1
   SSPCON1=0x22;
   TRISB=0xff;                                                     //make PORTB as input
   RBPU=0;                                                         //make RBPU=0 to enable pull-up resistor
   while (1)
   {
      if(sw1==0)                    //if switch 1 is pressed, will transfer data to slave to glow led1
      {
         SSPBUF=0x01;
      }

      else if(sw2==0)                //if switch2 is pressed, will transfer data to slave to glow led2
      {
         SSPBUF=0x02;
      }
      else if (sw1==0 && sw2==0)     //if both the switches are pressed then 2 led's should glow.
      {
      SSPBUF=0x03;
      }
      else                                                         //if no switch is pressed no led should glow.
      {
         SSPBUF=0x00;
      }

      }
}
```