Graduation Project

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1) Drive Microcontroler 1

```
#include <stdio.h>
#include <stdlib.h>
#include<avr/io.h>
#define F_CPU 16000000UL
#include"ALL.h"
#include"UART.h"
#include"mSPI.h"

char data;
int main()
{
   UART_init(9600);
   SPI_INIT(master,SPI_PS_128);
   while (1){
      data=UART_receive();
      SPI_TREANSMIT(data);
   }
   return 0;
   }
```

* Mode of UART is 9600
* SPI Initial master is 128
* Use UART is receiver
* Use SPI as a transmiter

2)Drive Microcontroler 2

```
#include<stdio.h>
#include<stdlib.h>
#define F_CPU 160000000UL
#include<avr/io.h>
#include"KIT_IO.h"
#include"ALL.h"
#include"mSPI.h"

char data;
int main()
{
   SPI_INIT(slave,SPI_PS_128);
   LEDs_init();
   while (1){
      data=SPI_RECIVIER();
      if (data == 'a'){
         LED0_TOGGLE();

      }else if
            (data == 'b'){
         LED1_TOGGLE();
   }else{
}return 0;
}
```

* Send the data about bluetooth module I mobile application
* SPI initiat slave 128
* Send data at SPI receiver
* LEDS init
* LED0 toggle at data ‘a’ send
* LED1 toggle at data ‘b’ send

3) Simulation