

```
#include <SoftwareSerial.h>

SoftwareSerial BLU(0,1);

#define redPin 6
#define greenPin 3
#define bluePin 5

void setup()
{
    //Serial setup
    Serial.begin(9600);
    Serial.println("-= HC-05 Bluetooth RGB
LED -=");

    BLU.begin(9600);
    BLU.println("-= HC-05 Bluetooth RGB LED
-=");

    pinMode(4, OUTPUT);

    digitalWrite(4,HIGH);
```

```
pinMode(redPin, OUTPUT);  
pinMode(greenPin, OUTPUT);  
pinMode(bluePin, OUTPUT);
```

```
setColor(255, 0, 0);  
delay(500);  
setColor(0, 255, 0);  
delay(500);  
setColor(0, 0, 255);  
delay(500);  
setColor(255, 255, 255);
```

```
}
```

```
void loop()
```

```
{
```

```
while (BLU.available() > 0)
```

```
{
```

```
    int redInt = BLU.parseInt();
```

```
    int greenInt = BLU.parseInt();
```

```
    int blueInt = BLU.parseInt();
```

```
    redInt = constrain(redInt, 0, 255);
```

```
    greenInt = constrain(greenInt, 0, 255);
```

```
blueInt = constrain(blueInt, 0, 255);

if (BLU.available() > 0)
{
    setColor(redInt, greenInt, blueInt);

    Serial.print("Red: ");
    Serial.print(redInt);
    Serial.print(" Green: ");
    Serial.print(greenInt);
    Serial.print(" Blue: ");
    Serial.print(blueInt);
    Serial.println();

    BLU.flush();
}
}

void setColor(int red, int green, int blue)
{
    analogWrite(redPin, red);
    analogWrite(greenPin, green);
    analogWrite(bluePin, blue);
}
```