

树莓派第七课 RGB_LED控制

```
pi@raspberrypi: ~/树莓派基础套件程序资料/第七课/RGB_LED三彩/
pi@raspberrypi: ~/树莓派基础套件程序资料/第七课/RGB_LED三彩 $ ls
RGBPi.c
pi@raspberrypi: ~/树莓派基础套件程序资料/第七课/RGB_LED三彩 $ nano RGBPi.c
pi@raspberrypi: ~/树莓派基础套件程序资料/第七课/RGB_LED三彩 $ gpio readall
```

BCM	wPi	Name	Mode	V	Physical	V	Mode	Name	wPi	BCM
		3.3v			1	2		5v		
2	8	SDA.1	ALT0	1	3	4		5V		
3	9	SCL.1	ALT0	1	5	6		0v		
4	7	GPIO. 7	IN	1	7	8	1	OUT	15	14
		0v			9	10	0	OUT	16	15
17	0	GPIO. 0	IN	0	11	12	1	OUT	1	18
27	2	GPIO. 2	OUT	0	13	14		0v		
22	3	GPIO. 3	OUT	0	15	16	0	OUT	4	23
		3.3v			17	18	0	OUT	5	24
10	12	MOSI	ALT0	0	19	20		0v		
9	13	MISO	ALT0	0	21	22	0	OUT	6	25
11	14	SCLK	ALT0	0	23	24	1	ALT0	10	8
		0v			25	26	1	ALT0	11	7
28	17	GPIO.17	IN	0	51	52	0	IN	18	29
30	19	GPIO.19	IN	0	53	54	0	IN	20	31

```
pi@raspberrypi: ~/树莓派基础套件程序资料/第七课/RGB_LED三彩 $ gcc -Wall -o RGBPi RGBPi.c -lwi
ringPi
pi@raspberrypi: ~/树莓派基础套件程序资料/第七课/RGB_LED三彩 $ ls
RGBPi RGBPi.c
pi@raspberrypi: ~/树莓派基础套件程序资料/第七课/RGB_LED三彩 $ sudo ./RGBPi
^Cpi@raspberrypi: ~/树莓派基础套件程序资料/第七课/RGB_LED三彩 $
```

图一

```
pi@raspberrypi: ~/RGB_LED/RGBPi.c$ nano RGBPi.c
GNU nano 2.2.6 File: RGBPi.c Modified

#include <wiringPi.h>
#include <softPwm.h>
#include <stdio.h>
#include <stdlib.h>
#include <stdint.h>

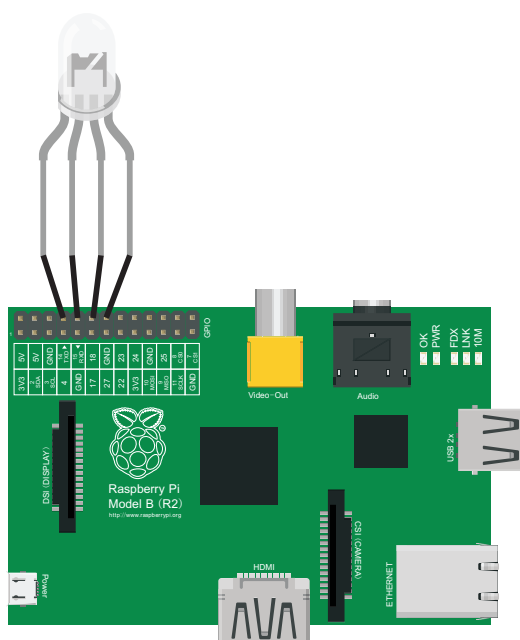
void color(unsigned char red, unsigned char green, unsigned char blue)
{
    softPwmWrite(15,100-red);
    softPwmWrite(16,100-green);
    softPwmWrite(1,100-blue);
}

int main()
{
    wiringPiSetup();
    softPwmCreate(15,0,100);
    softPwmCreate(16,0,100);
    softPwmCreate(1,0,100);

    //pinMode(5,PWM_OUTPUT);
    //pinMode(6,OUTPUT);
    //pinMode(10,PWM_OUTPUT);
    //pinMode(11,PWM_OUTPUT);

    for(;;)
    {
        ^G Get Help    ^O WriteOut    ^R Read File    ^Y Prev Page    ^K Cut Text     ^C Cur Pos
        ^X Exit        ^J Justify     ^W Where Is    ^V Next Page    ^U UnCut Text   ^T To Spell
    }
```

图二



图三