

Project 4: Softpwm LED control

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pi@raspberrypi: ~/树莓派基础套件程序资料/第四课\ \ softpwm灯控制/
pi@raspberrypi: ~/树莓派基础套件程序资料/第四课\ \ softpwm灯控制/ $ ls
softpwm6.c
pi@raspberrypi: ~/树莓派基础套件程序资料/第四课\ \ softpwm灯控制/ $ nano softpwm6.c
pi@raspberrypi: ~/树莓派基础套件程序资料/第四课\ \ softpwm灯控制/ $ gcc -Wall -o softpwm6 softpwm6.c
-lwiringPi
pi@raspberrypi: ~/树莓派基础套件程序资料/第四课\ \ softpwm灯控制/ $ ls
softpwm6  softpwm6.c
pi@raspberrypi: ~/树莓派基础套件程序资料/第四课\ \ softpwm灯控制/ $ gpio readall
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| BCM | wPi |   Name   | Mode | V | Physical | V | Mode | Name   | wPi | BCM |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
|      |      | 3.3v     |      |   | 1 || 2 |      |      | 5v     |      |      |
|  2  |  8  | SDA.1    | ALTO | 1 | 3 || 4 |      |      | 5V     |      |      |
|  3  |  9  | SCL.1    | ALTO | 1 | 5 || 6 |      |      | 0v     |      |      |
|  4  |  7  | GPIO. 7  | IN   | 1 | 7 || 8 |  1  | ALTO | TxD    | 15  | 14  |
|      |      | 0v       |      |   | 9 || 10 |  1  | ALTO | RxD    | 16  | 15  |
| 17  |  0  | GPIO. 0  | IN   | 0 | 11 || 12 |  0  | ALT5 | GPIO. 1 | 1   | 18  |
| 27  |  2  | GPIO. 2  | IN   | 0 | 13 || 14 |      |      | 0v     |      |      |
| 22  |  3  | GPIO. 3  | IN   | 0 | 15 || 16 |  0  | IN   | GPIO. 4 | 4   | 23  |
|      |      | 3.3v     |      |   | 17 || 18 |  0  | IN   | GPIO. 5 | 5   | 24  |
| 10  | 12  | MOSI     | ALTO | 0 | 19 || 20 |      |      | 0v     |      |      |
|  9  | 13  | MISO     | ALTO | 0 | 21 || 22 |  0  | OUT  | GPIO. 6 | 6   | 25  |
| 11  | 14  | SCLK     | ALTO | 0 | 23 || 24 |  1  | ALTO | CE0     | 10  |  8  |
|      |      | 0v       |      |   | 25 || 26 |  1  | ALTO | CE1     | 11  |  7  |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 28  | 17  | GPIO.17  | IN   | 0 | 51 || 52 |  0  | IN   | GPIO.18 | 18  | 29  |
| 30  | 19  | GPIO.19  | IN   | 0 | 53 || 54 |  0  | IN   | GPIO.20 | 20  | 31  |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| BCM | wPi |   Name   | Mode | V | Physical | V | Mode | Name   | wPi | BCM |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
pi@raspberrypi: ~/树莓派基础套件程序资料/第四课\ \ softpwm灯控制/ $ sudo ./softpwm6
^Cpi@raspberrypi: ~/树莓派基础套件程序资料/第四课\ \ softpwm灯控制/ $

```

Pic. 1

```
pi@raspberrypi: ~/...
GNU nano 2.2.6 File: softpwm6.c

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

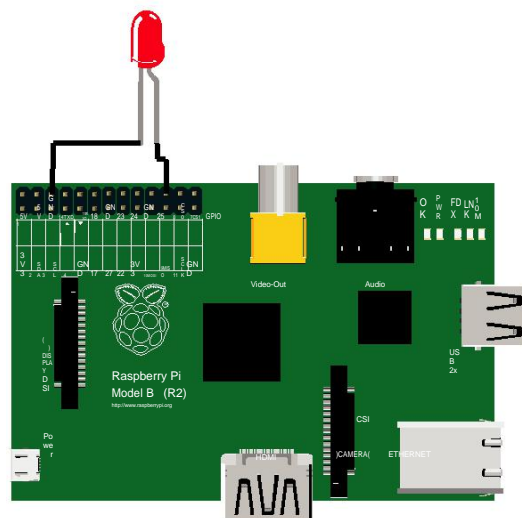
int main()
{
    int bright;
    wiringPiSetup ();
    softPwmCreate (6, 0, 100) ;

    for (;;)
    {
        for (bright = 0 ; bright < 100 ; ++bright)
        {
            softPwmWrite (6, bright) ;
            delay (10) ;
        }

        for (bright = 100 ; bright >= 0 ; --bright)
        {
            softPwmWrite (6, bright) ;
            delay (10) ;
        }
    }
}

^G Get Help  ^O WriteOut  ^R Read File  ^V Prev Page  ^K Cut Text  ^C Cur Pos
^X Exit      ^J Justify   ^W Where Is   ^V Next Page  ^U UnCut Text ^T To Spell
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Pic. 2



Pic. 3