

Project 19: Easy control of Servo using C language

```

pi@raspberrypi: ~/树莓派基础套件程序资料 $ cd 第十九课\ \ 舵机c语言简单控制/
舵机c语言简单控制 pi@raspberrypi ~/树莓派基础套件程序资料/第十九课 舵机c语言简单控制 $ ls
servo_digital.c
舵机c语言简单控制 pi@raspberrypi ~/树莓派基础套件程序资料/第十九课 舵机c语言简单控制 $ nano servo_digital.c
舵机c语言简单控制 pi@raspberrypi ~/树莓派基础套件程序资料/第十九课 舵机c语言简单控制 $ nano guide19
舵机c语言简单控制 pi@raspberrypi ~/树莓派基础套件程序资料/第十九课 舵机c语言简单控制 $ nano guide19
舵机c语言简单控制 pi@raspberrypi ~/树莓派基础套件程序资料/第十九课 舵机c语言简单控制 $ gpio readall
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| BCM | wPi |   Name   | Mode | V | Physical | V | Mode | Name   | wPi | BCM |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 2   | 8   | SDA.1   | ALTO | 1 | 3   | 4   |   |   |   |   |   |
| 3   | 9   | SCL.1   | ALTO | 1 | 5   | 6   |   |   |   |   |   |
| 4   | 7   | GPIO. 7 | OUT  | 0 | 7   | 8   | 1 | OUT | TxD   | 15 | 14 |
|   |   | 0v      |   |   | 9   | 10  | 0 | OUT | RxD   | 16 | 15 |
| 17  | 0   | GPIO. 0 | OUT  | 1 | 11  | 12  | 0 | OUT | GPIO. 1 | 1 | 18 |
| 27  | 2   | GPIO. 2 | OUT  | 0 | 13  | 14  |   |   |   |   |   |
| 22  | 3   | GPIO. 3 | OUT  | 1 | 15  | 16  | 1 | OUT | GPIO. 4 | 4 | 23 |
|   |   | 3.3v    |   |   | 17  | 18  | 1 | OUT | GPIO. 5 | 5 | 24 |
| 10  | 12  | MOSI    | OUT  | 0 | 19  | 20  |   |   |   |   |   |
| 9   | 13  | MISO    | OUT  | 0 | 21  | 22  | 0 | OUT | GPIO. 6 | 6 | 25 |
| 11  | 14  | SCLK    | OUT  | 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 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
舵机c语言简单控制 pi@raspberrypi ~/树莓派基础套件程序资料/第十九课 舵机c语言简单控制 $ gcc servo_digital.c -o servo_digital -lwiringPi
舵机c语言简单控制 pi@raspberrypi ~/树莓派基础套件程序资料/第十九课 舵机c语言简单控制 $ ls
guide19 servo_digital servo_digital.c
舵机c语言简单控制 pi@raspberrypi ~/树莓派基础套件程序资料/第十九课 舵机c语言简单控制 $ sudo ./servo_digital
^C舵机c语言简单控制 pi@raspberrypi ~/树莓派基础套件程序资料/第十九课 舵机c语言简单控制 $

```

Pic. 1

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

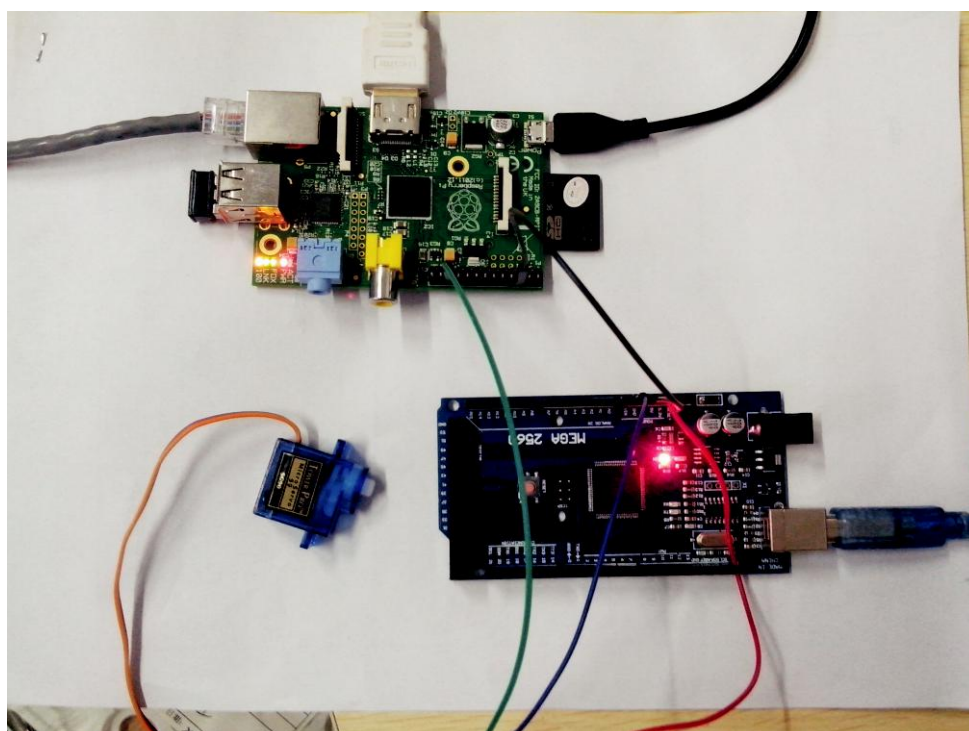
#include <wiringPi.h>

int main()
{
    wiringPiSetup();
    pinMode(6, OUTPUT);
    int i;
    for(;;)
    {
        for(i=0; i<50; i++)
        {
            digitalWrite(6, HIGH);
            delay(1);
            digitalWrite(6, LOW);
            delay(17);
        }
        delay(100);
        for(i=0; i<50; i++)
        {
            digitalWrite(6, HIGH);
            delay(2);
            digitalWrite(6, LOW);
            delay(16);
        }
    }

    return 0;
}
```

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

Pic. 2



Pic. 3