

Project 21: 1602 LCD (C language version)

```

pi@raspberrypi: ~/树莓派基础套件程序资料/第二十一课/1602液晶屏C语言版本/1602_zz1.c
pi@raspberrypi: ~/树莓派基础套件程序资料/第二十一课/1602液晶屏C语言版本/1602_zz1.c $ ls
1602_zz1.c
pi@raspberrypi: ~/树莓派基础套件程序资料/第二十一课/1602液晶屏C语言版本/1602_zz1.c $ nano 1602_zz1.c
pi@raspberrypi: ~/树莓派基础套件程序资料/第二十一课/1602液晶屏C语言版本/1602_zz1.c $ nano guide21
pi@raspberrypi: ~/树莓派基础套件程序资料/第二十一课/1602液晶屏C语言版本/1602_zz1.c $ nano guide21
pi@raspberrypi: ~/树莓派基础套件程序资料/第二十一课/1602液晶屏C语言版本/1602_zz1.c $ nano guide21
pi@raspberrypi: ~/树莓派基础套件程序资料/第二十一课/1602液晶屏C语言版本/1602_zz1.c $ nano guide21
pi@raspberrypi: ~/树莓派基础套件程序资料/第二十一课/1602液晶屏C语言版本/1602_zz1.c $ gpio readall
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| BCM | wPi |   Name   | Mode | V | Physical | V | Mode |   Name   | wPi | BCM |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 3.3v |     |         |      |   | 1 | 2 |     |         |     |     | |
| 2 | 8 | SDA.1 | ALTO | 1 | 3 | 4 |     |         |     |     |
| 3 | 9 | SCL.1 | ALTO | 1 | 5 | 6 |     |         |     |     |
| 4 | 7 | GPIO. 7 | IN | 0 | 7 | 8 | 1 | ALTO | TxD | 15 | 14 |
|     |     | 0v |     |   | 9 | 10 | 1 | ALTO | RxD | 16 | 15 |
| 17 | 0 | GPIO. 0 | IN | 0 | 11 | 12 | 0 | IN | GPIO. 1 | 1 | 18 |
| 27 | 2 | GPIO. 2 | IN | 0 | 13 | 14 |     |         |     |     |
| 22 | 3 | GPIO. 3 | IN | 0 | 15 | 16 | 1 | OUT | GPIO. 4 | 4 | 23 |
|     |     | 3.3v |     |   | 17 | 18 | 0 | OUT | GPIO. 5 | 5 | 24 |
| 10 | 12 | MOSI | ALTO | 0 | 19 | 20 |     |         |     |     |
| 9 | 13 | MISO | ALTO | 0 | 21 | 22 | 1 | 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/第二十一课/1602液晶屏C语言版本/1602_zz1.c $ gcc 1602_zz1.c -o 1602_zz1 -lwiringPi
pi@raspberrypi: ~/树莓派基础套件程序资料/第二十一课/1602液晶屏C语言版本/1602_zz1.c $ ls
1602_zz1 1602_zz1.c guide21
pi@raspberrypi: ~/树莓派基础套件程序资料/第二十一课/1602液晶屏C语言版本/1602_zz1.c $ sudo ./1602_zz1
^Cpi@raspberrypi: ~/树莓派基础套件程序资料/第二十一课/1602液晶屏C语言版本/1602_zz1.c $

```

Pic. 1

```
pi@raspberrypi: ~/编写板男俱境坛€渡桶欢绑填答壁勘枞/殆 旁铎很靖璇? 1602 婆叉檣潮度璇  ■ 璇球
GNU nano 2.2.6                                File: 1602_zz1.c

#include <wiringPi.h>

int main()
{
//int RS=12,RW=11,EN=2;
//int DB0=3,DB1=4,DB2=5,DB3=6,DB4=7,DB5=8,DB6=9,DB7=10;
int DB0=0,DB1=1,DB2=2,DB3=3,DB4=4,DB5=5,DB6=6,DB7=7;
int RS=12,RW=13,EN=14;
//int i;
int i;

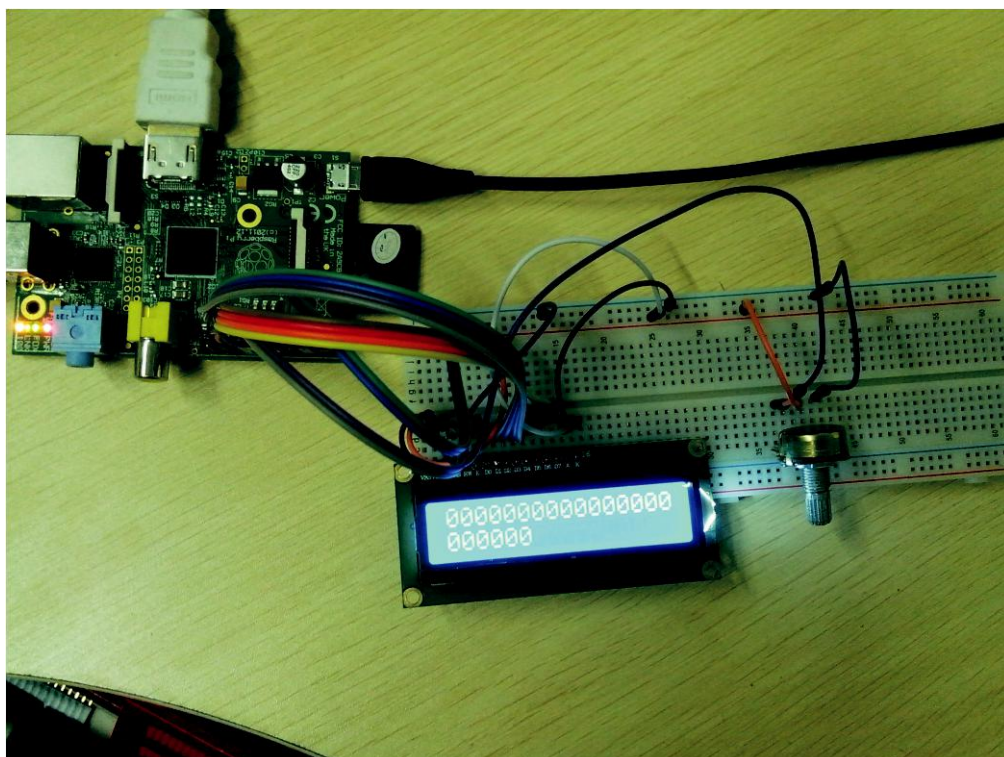
wiringPiSetup();

//Serial.begin(9600);
pinMode(RS,OUTPUT);
pinMode(RW,OUTPUT);
pinMode(EN,OUTPUT);
pinMode(DB0,OUTPUT);
pinMode(DB1,OUTPUT);
pinMode(DB2,OUTPUT);
pinMode(DB3,OUTPUT);
pinMode(DB4,OUTPUT);
pinMode(DB5,OUTPUT);
pinMode(DB6,OUTPUT);
pinMode(DB7,OUTPUT);

digitalWrite(RS,HIGH);
digitalWrite(RW,LOW);
digitalWrite(RS,LOW);
digitalWrite(EN,LOW);
delay(1);
//digitalWrite(DB0,0);
//digitalWrite(DB1,0);
digitalWrite(DB2,0);

^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
```

Pic. 2



Pic. 3