1. Install nano editor,gcc compiler and Git

sudo apt-get install gcc

sudo apt-get install nano

sudo apt-get install git

```
pi@raspberrypi:~ $ sudo apt-get install gcc
pi@raspberrypi:~ $ sudo apt-get install nano
pi@raspberrypi:~ $ sudo apt-get install git
```

2.Install wiringPi

2.1 Enter the following command to download the WiringPi file to the current directory on the Raspberry Pi system.

sudo git clone https://github.com/WiringPi/WiringPi

```
pi@yahboom4wd:~ $ sudo git clone https://github.com/WiringPi/WiringPi
正克隆到 'WiringPi'...
remote: Enumerating objects: 1385, done.
remote: Total 1385 (delta 0), reused 0 (delta 0), pack-reused 1385
接收对象中: 100% (1385/1385), 713.54 KiB | 9.00 KiB/s, 完成.
处理 delta 中: 100% (861/861), 完成.
```

Wait patiently for its installation to complete.

2.2 After the download is complete, we can see a WiringPi folder in the current directory. As shown below.

```
pi@yahboom4wd:~ $ ls
advance.c      MagPi                          Pictures   wiringPi
bluetooth.sh   master.zip                     Public     WiringPi
ColorLED.c     mjpg-streamer-master           python     wiringpi-latest.deb
Desktop        Music                          SmartCar   ZZX_test
Documents      pi3-miniuart-bt-overlay.dtb    Templates
Downloads      pi3-miniuart-bt-overlay.zip    Videos
```

2.3 Input the following command to enter the WiringPi folder directory.

cd WiringPi/

```
pi@yahboom4wd:~ $ cd WiringPi/
```

2.4 Input the following command to install WiringPi.

sudo ./build

```
pi@yahboom4wd:~/WiringPi $ sudo ./build
wiringPi Build script
=====================


WiringPi Library
[UnInstall]
[Compile] wiringPi.c
[Compile] wiringSerial.c
[Compile] wiringShift.c
[Compile] piHiPri.c
[Compile] piThread.c
[Compile] wiringPiSPI.c
[Compile] wiringPiI2C.c
[Compile] softPwm.c
[Compile] softTone.c
wiringPi.c:1327:21: warning: 'digitalWrite8Dummy' defined but not used [-Wunused
-function]
 static         void digitalWrite8Dummy       (UNU struct wiringPiNodeStruct *no
de, UNU int pin, UNU int value) { return ; }
                    ^~~~~~~~~~~~~~~~~~
wiringPi.c:1326:21: warning: 'digitalRead8Dummy' defined but not used [-Wunused-
function]
 static unsigned int digitalRead8Dummy        (UNU struct wiringPiNodeStruct *no
de, UNU int UNU pin)            { return 0 ; }
                    ^~~~~~~~~~~~~~~~~
[Compile] mcp23008.c
[Compile] mcp23016.c
[Compile] mcp23017.c
[Compile] mcp23s08.c
[Compile] mcp23s17.c
[Compile] sr595.c
```

Wait patiently for its installation to complete. The interface shown below, without any error, it means that the installation is complete.

```
GPIO Utility
[Compile] gpio.c
[Compile] readall.c
[Link]
[Install]

All Done.

NOTE: To compile programs with wiringPi, you need to add:
    -lwiringPi
  to your compile line(s) To use the Gertboard, MaxDetect, etc.
  code (the devLib), you need to also add:
    -lwiringPiDev
  to your compile line(s).
```

2.5 Enter the following command to view the version number.

gpio -v

```
pi@yahboom4wd:~/WiringPi $ gpio -v
gpio version: 2.60
Copyright (c) 2012-2018 Gordon Henderson
This is free software with ABSOLUTELY NO WARRANTY.
For details type: gpio -warranty

Raspberry Pi Details:
  Type: Pi 4B, Revision: 01, Memory: 0MB, Maker: Sony
  * Device tree is enabled.
  *--> Raspberry Pi 4 Model B Rev 1.1
  * This Raspberry Pi supports user-level GPIO access.
```

2.6 We enter gpio readall, we will find that there is no error prompt, and we can display the status of each pin of Raspberry Pi, as shown in the figure below.

```
pi@yahboom4wd:~/WiringPi $ gpio readall
 +-----+-----+---------+------+---+---Pi 4B--+---+------+---------+-----+-----+
 | BCM | wPi |   Name  | Mode | V | Physical | V | Mode | Name    | wPi | BCM |
 +-----+-----+---------+------+---+----++----+---+------+---------+-----+-----+
 |     |     |    3.3v |      |   |  1 || 2  |   |      | 5v      |     |     |
 |   2 |   8 |   SDA.1 |  OUT | 1 |  3 || 4  |   |      | 5v      |     |     |
 |   3 |   9 |   SCL.1 |   IN | 1 |  5 || 6  |   |      | 0v      |     |     |
 |   4 |   7 | GPIO. 7 |   IN | 1 |  7 || 8  | 1 | ALT0 | TxD     | 15  | 14  |
 |     |     |      0v |      |   |  9 || 10 | 1 | ALT0 | RxD     | 16  | 15  |
 |  17 |   0 | GPIO. 0 |   IN | 0 | 11 || 12 | 0 | IN   | GPIO. 1 | 1   | 18  |
 |  27 |   2 | GPIO. 2 |  OUT | 0 | 13 || 14 |   |      | 0v      |     |     |
 |  22 |   3 | GPIO. 3 |  OUT | 0 | 15 || 16 | 0 | OUT  | GPIO. 4 | 4   | 23  |
 |     |     |    3.3v |      |   | 17 || 18 | 0 | OUT  | GPIO. 5 | 5   | 24  |
 |  10 |  12 |    MOSI | ALT0 | 0 | 19 || 20 |   |      | 0v      |     |     |
 |   9 |  13 |    MISO |  OUT | 0 | 21 || 22 | 0 | IN   | GPIO. 6 | 6   | 25  |
 |  11 |  14 |    SCLK |  OUT | 0 | 23 || 24 | 1 | OUT  | CE0     | 10  | 8   |
 |     |     |      0v |      |   | 25 || 26 | 1 | IN   | CE1     | 11  | 7   |
 |   0 |  30 |   SDA.0 |   IN | 1 | 27 || 28 | 0 | OUT  | SCL.0   | 31  | 1   |
 |   5 |  21 | GPIO.21 |   IN | 1 | 29 || 30 |   |      | 0v      |     |     |
 |   6 |  22 | GPIO.22 |   IN | 1 | 31 || 32 | 0 | IN   | GPIO.26 | 26  | 12  |
 |  13 |  23 | GPIO.23 |  OUT | 0 | 33 || 34 |   |      | 0v      |     |     |
 |  19 |  24 | GPIO.24 |  OUT | 0 | 35 || 36 | 0 | OUT  | GPIO.27 | 27  | 16  |
 |  26 |  25 | GPIO.25 |  OUT | 0 | 37 || 38 | 0 | OUT  | GPIO.28 | 28  | 20  |
 |     |     |      0v |      |   | 39 || 40 | 0 | OUT  | GPIO.29 | 29  | 21  |
 +-----+-----+---------+------+---+----++----+---+------+---------+-----+-----+
 | BCM | wPi |   Name  | Mode | V | Physical | V | Mode | Name    | wPi | BCM |
 +-----+-----+---------+------+---+---Pi 4B--+---+------+---------+-----+-----+
```