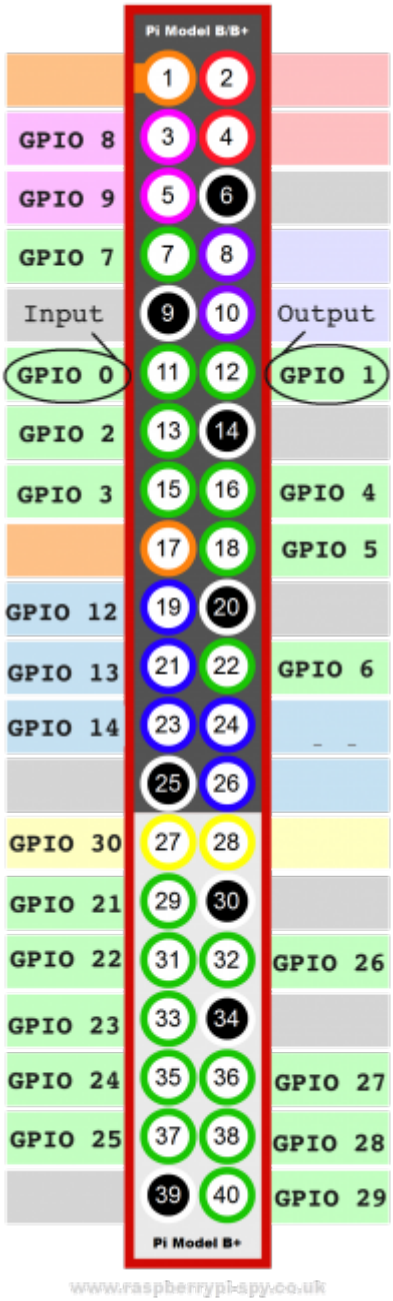
# GPIO in 4 Steps

Once you understand the GPIO layout and have wiringPi libraries, you can code in 4 steps.




### 1. Identify Pins

Identify which Pins to use from the GPIO layout. Here I will be using PIN 0 and PIN 1.

### 2. Set I/O mode for Pins

```
/*pinMode(PIN, MODE);*/

/*to read a value from breadboard,
  set the pin mode to input*/
pinMode(0, INPUT);

/*to write a value to breadboard,
 set the pin mode to output*/
pinMode(1, OUTPUT);
```

### 3. Here's how you read and write

```
/*Read*/
int value = digitalRead(0);

/*Write*/
digitalWrite(1, HIGH);
```

### 4. Use delays between multiple I/O

It takes somewhere in nano-seconds to read/write values. Depending on which parts you use, you want to set delay accordingly. When dealing with TTL gates, have a delay of at least 0.1 seconds.

```
/*for 0.1 seconds*/
delay(100);
```