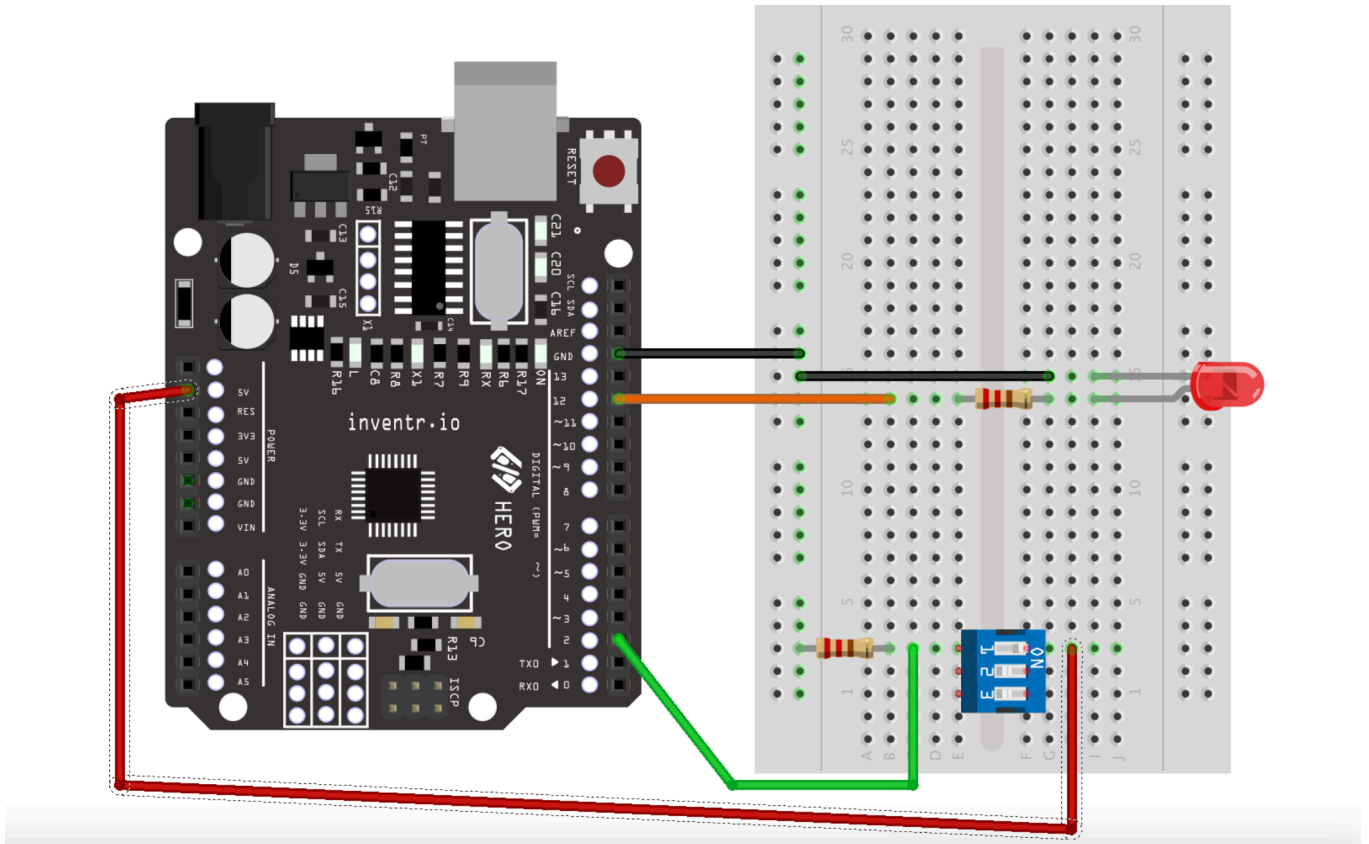


# Ya Dip....Switch

## *Dip Switch*



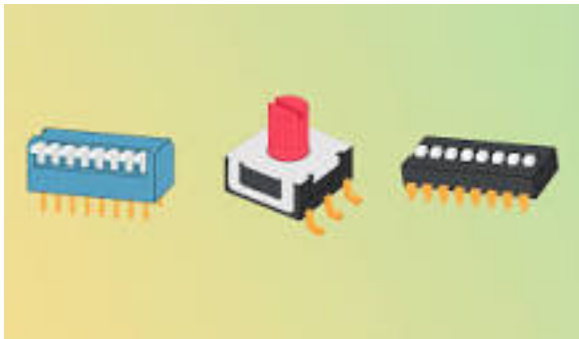
## What is a DIP Switch?

DIP is short for Dual In-Line Package. A DIP switch is a set of electrical switches packaged in a small box or housing. They are designed to be mounted on printed circuit boards to provide a range of electrical inputs to an electronic device based on the position of the individual switches. Typically, they are arranged in a line or circle (rotary DIP).

DIP switches are an alternative to jumper blocks. Their main advantages are the ability to quickly change positions and the fact there are no parts to lose. In recent times DIP switches have lessened in popularity due to the rise of easily customizable software configurations.

**(This explanation is wayyyyy more clear)!**

**What is a DIP switch used for?**



It is an electromechanical device requiring a user to **manually move the actuator so that a different electronic circuit is activated or deactivated**. Commonly mounted on a PCB or breadboard, DIP switches allow users to quickly preconfigure or toggle an electronic device between a variety of settings or operating modes.

**Before you just toss the code I gave you into the Arduino IDE... come tell me what this code will actually do.. you can clearly see it ....right?**

## Dween Code:

```
1.  int LED = 12;
2.  int Switch1 = 2; //pin 2 will be attached to our switch
3.
4.  void setup() {
5.    //setup both an output AND an input on the HERO
6.    pinMode(LED, OUTPUT);
7.    pinMode(Switch1, INPUT);
8.
9.  }
10.
11.
12. void loop() {
13.    //now within loop() we'll take actions based on the status of the input switch
14.
15.    //this is a conditional test...
16.
17.    if (digitalRead(Switch1) == HIGH){
18.        digitalWrite(LED, LOW);
19.        delay(1000);
20.        digitalWrite(LED, HIGH);
21.        delay(100);
22.        digitalWrite(LED, LOW);
```

```
23. delay(100);  
24. digitalWrite(LED, HIGH);  
25. delay(100);  
26. }  
27. else {  
28. digitalWrite(LED, LOW); // turn LED OFF  
29. }  
30. }
```

HOW MANY SWITCH PINS DID YOU USE ON THE DIP SWITCH?

HOW MANY MORE ARE AVAILABLE?

## ***RAD THINGS TO DO NEXT....***

Utilize the remaining switch pins, and add 2 additional LED lights.

Items to consider....  
number of LEDs....  
resistors.....  
flex wires.....

Do I need to edit or add to the code??????