

## Using Single Switch operating output On/OFF

```
#include <stdio.h>

#include <stdlib.h>

const int button = 5;    // GPIO 8 for the button

const int led =13;      // GPIO 7 for the LED

int ledflag=0;         // LED status flag

void setup() {

    pinMode(button,INPUT);    // define button as an input

    pinMode(led,OUTPUT);    // define LED as an output

    digitalWrite(led,LOW);    // turn output off just in case

}

void loop() {

    if (digitalRead(button)==HIGH){ // if button is pressed

        if (ledflag==0) {        // and the status flag is LOW

            ledflag=1;           // make status flag HIGH

            digitalWrite(led,HIGH); // and turn on the LED

        }                        //

    } else {                     // otherwise...

        ledflag=0;              // make status flag LOW

        digitalWrite(led,LOW);  // and turn off the LED

    }

    delay(1000);                // wait a sec for the

    }                            // hardware to stabilize

    }                            // begin again
```

