

EEPROM

```
// pin definitions
int ledPin = 13;
int buttonPin = 2;

// global variables
int lastButtonState = 1;
long unsigned int lastPress;
int debounceTime = 20;
int counter;

void setup() {
  // setup pin modes
  pinMode(ledPin, OUTPUT);
  pinMode(buttonPin, INPUT_PULLUP);

  //initialise Serial port
  Serial.begin(9600);

  //assign counter the value of address 0
  counter = EEPROM.read(0);
  //write a 0 to address 0. This allows for consecutive resets to reset the counter
  EEPROM.write(0,0);
}
```

Programming

```
}  
  
void loop() {  
  int buttonState = digitalRead(buttonPin); //read the state of buttonPin and store it as buttonState (0 or 1)  
  
  if((millis() - lastPress) > debounceTime) //if the time between the last buttonChange is greater than the  
  debounceTime  
  {  
    lastPress = millis(); //update lastPress  
    if(buttonState == 0 && lastButtonState == 1) //if button is pressed and was released last change  
    {  
      counter++;  
      EEPROM.write(0, counter); //write counter to address 0  
      digitalWrite(ledPin, HIGH); //momentary LED  
      lastButtonState = 0; //record the lastButtonState  
  
      //print the results  
      Serial.print("Counter: ");  
      Serial.println(counter);  
    }  
    if(buttonState == 1 && lastButtonState == 0) //if button is not pressed, and was pressed last change  
    {  
      lastButtonState = 1; //record the lastButtonState  
      digitalWrite(ledPin, LOW); //momentary LED  
    }  
  }  
}
```

Programming

}