**AIM: Design an automatic night lighting system such the system is only activated when the master control switch is pressed. a) Below 50% value of full brightness led blinks with a freq. of 500 msec. b) Above 50% value of full brightness led blinks with a freq. of 100 msec.**

**APPRATOUS:PUSH BUTTON,RESISTOR,LED,ARDUINO UNO,PHOTORESISTOR,CONNECTING WIRES,BREADBOARD.**

**CODE:** **int l =A0;**

**int sensorValue=0;**

**void setup()**

**{**

**Serial.begin(9600);**

**pinMode(9,OUTPUT);**

**}**

**void loop()**

**{**

**sensorValue=analogRead(l);**

**Serial.println(sensorValue);**

**delay(100);**

**if(sensorValue>50)**

**{**

**digitalWrite(9,HIGH);**

**delay(500);**

**digitalWrite(9,LOW);**

**delay(500);**

**}**

**else**

**if(sensorValue<50)**

**{**

**digitalWrite(9, HIGH);**

**delay(100);**

**digitalWrite(9, LOW);**

**delay(100);**

**}**

**}**

**DIAGRAM:** 