



CHANDIGARH UNIVERSITY

Discover. Learn. Empower.

BEEE LAB EVALUATION

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UID : 19BCG1077

SECTION : CSE (G&G)

SUB: BEEE LAB

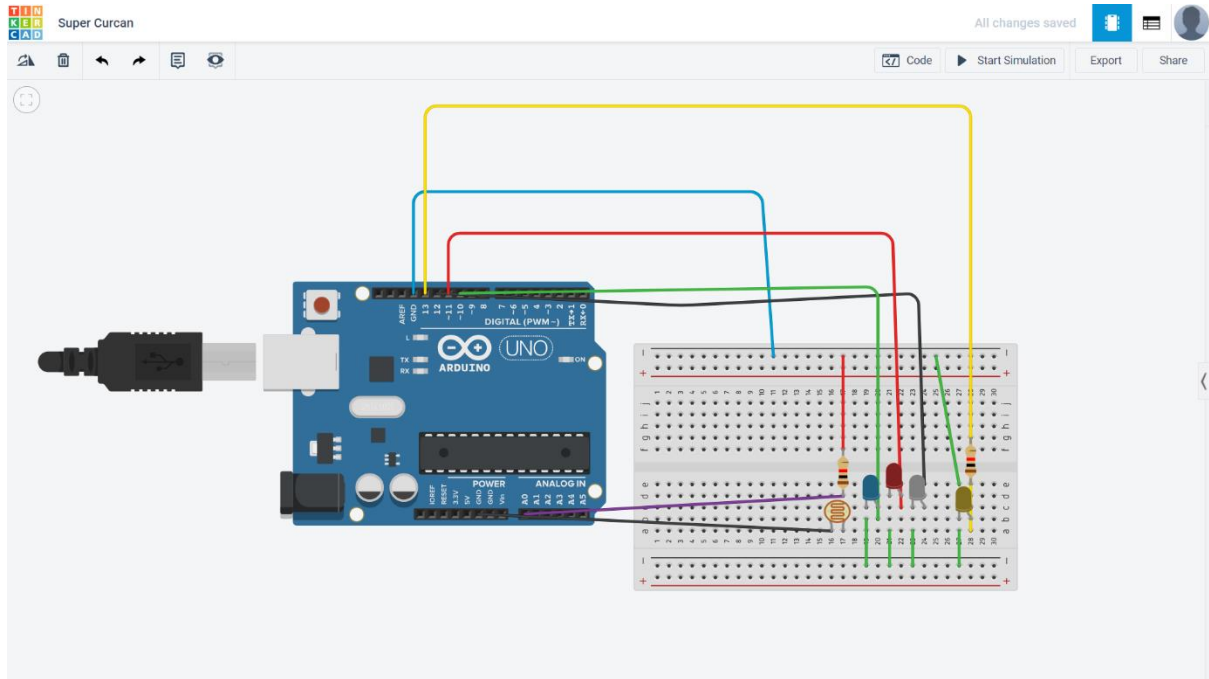
Circuit diagram

Evaluation question

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.

Theory

Setup images



Setup code

```
int value = 0;  
void setup() {  
    Serial.begin(9600);  
    pinMode(10, OUTPUT);  
    pinMode(11, OUTPUT);  
    pinMode(12, OUTPUT);  
    pinMode(13, OUTPUT);  
    pinMode(A0, INPUT);
```

}

void loop() {

value = analogRead(A0);

if (value>129)

{

digitalWrite(10, HIGH);

digitalWrite(11, LOW);

digitalWrite(12, LOW);

digitalWrite(13, LOW);

delay(100);

}

else if (value < 128) {

digitalWrite(10, HIGH);

digitalWrite(11, HIGH);

```
digitalWrite(12, HIGH);  
digitalWrite(13, HIGH);  
delay(500);  
}  
}
```

Learning & Observation

`While experiment we observe the the led is blinking when programmed and if its brightness is less than 50% ,it shows full brightness and above 50% it shows one led glows with full brightness.

problems & troubleshooting

the work has to be done properly as it is much sensitive .it needs proper attention.

Outcomes

If the brightness sense by the LDR is below 50% value of full brightness led glows.

and if the brightness sense by the LDR is above 50% value of full brightness only one led glows with full brightness.