Bahria University,

Karachi Campus



COURSE: CEL-439 EMBEDDED SYSTEMS

TERM: FALL 2022, CLASS: BSE- 5(A)

Submitted By:

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(Name) (Reg. No.)

Submitted To:

**Engr. Syed Zia Uddin/Engr. Rizwan Fazal**

Signed Remarks: Score:

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LAB EXPERIMENT NO.

1

LIST OF TASKS

|  |  |
| --- | --- |
| TASK NO | OBJECTIVE |
| **1** | Write a sketch to interface Arduino with LED, LED should blink with a delay of 1 second. |
| 2 | Write a sketch to interface Arduino with SPDT switch & LED. |

Submitted On:

13/10/2022

(Date: DD/MM/YY)

**Task No. 1: Write a sketch to interface Arduino with LED, LED should blink with a delay of 1 second.**

**Solution:**

int LED = 7;

void setup( )

{

pinMode(LED, OUTPUT);

}

void loop( )

{

digitalWrite(LED, HIGH);

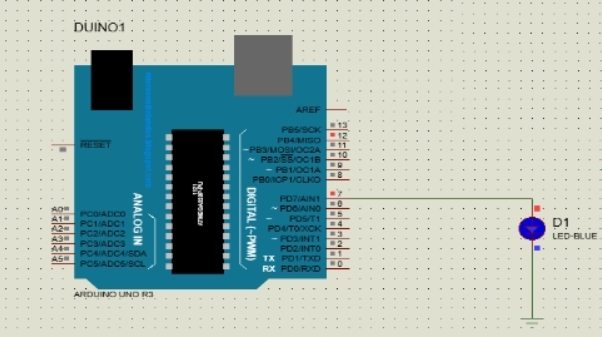
delay(1000);

digitalWrite(LED, LOW);

delay(1000);

}

**Output:**



**Task No. 2:** **Write a sketch to interface Arduino with SPDT switch & LED.**

**Solution:**

void setup() {

pinMode(12,INPUT);

pinMode(7,OUTPUT);

}

void loop() {

int sw = digitalRead(12);

if(sw==1)

{

digitalWrite(7,HIGH);

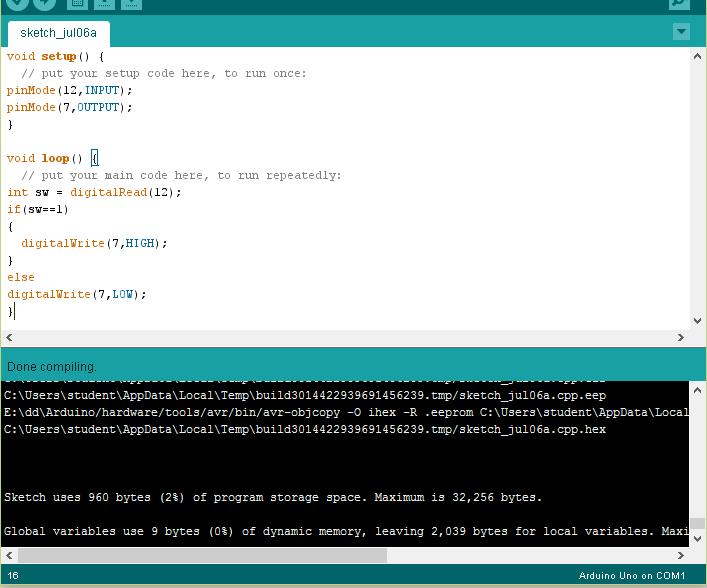
}

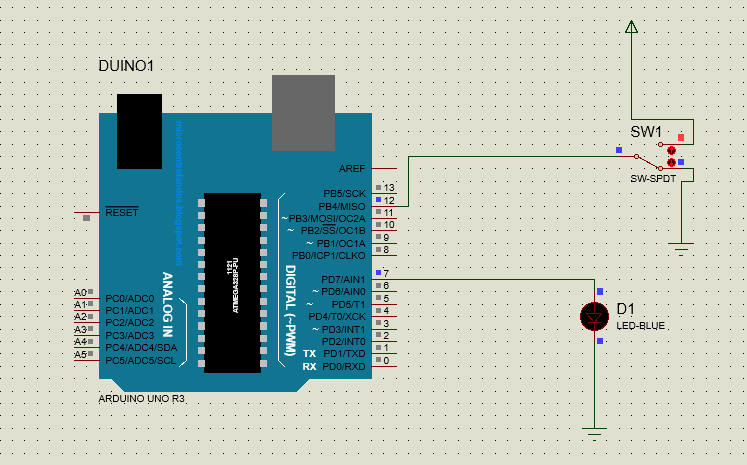
else

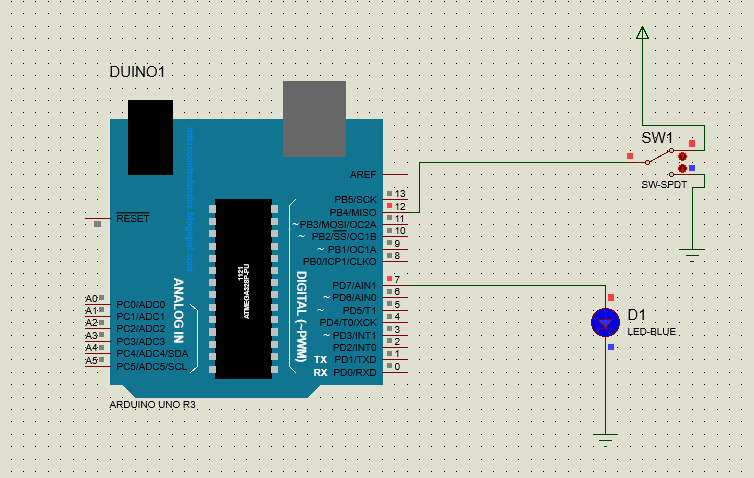
digitalWrite(7,LOW);

}

**Output:**







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LAB EXPERIMENT NO.

2

LIST OF TASKS

|  |  |
| --- | --- |
| TASK NO | OBJECTIVE |
| 1 | Write a sketch to interface Arduino with the Relay. The Relay should be controlled by a SPDT Switch. |

Submitted On:

13/10/2022

(Date: DD/MM/YY)

**Task No. 1: Write a sketch to interface Arduino with the Relay. The Relay should be controlled by a SPDT Switch.**

**Solution:**

void setup(){

pinMode(12,INPUT);

pinMode(7,OUTPUT);

}

void loop() {

int sw=digitalRead(12);

If(sw==1)

{ digitalWrite(7,HIGH); }

else

digitalWrite(7,LOW);

}

void setup() {

pinMode(12,INPUT);

pinMode(7,OUTPUT);

}

void loop() {

int sw = digitalRead(12);

if(sw==1)

{

digitalWrite(7,HIGH);

}

else

digitalWrite(7,LOW);

}

**Output:**

Diagram, schematic

Description automatically generated

Diagram

Description automatically generated