Bahria University

Karachi Campus

A logo with text on it

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LAB EXPERIMENT NO.

**11**

LIST OF TASKS

|  |  |
| --- | --- |
| TASK NO | OBJECTIVE |
| **1** | Write a program to print a string on serial monitor |
| 2 | Write a program to control the LED on “Arduino 2” using SPDT switch on “Arduino 1” through UART communication. |

Submitted On:

29 December 2023

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(Date: DD/MM/YY)

**Task 1**

Write a program to print a string on serial monitor.

void setup() {

Serial.begin(9600); }

void loop() {

  char a[16] = "Embedded Systems";

  char b[6] = "BSE-5B";

  int index=0;

  for(index=0 ; index <16 ; index++)

 {

  Serial.print(a[index]);

  }

Serial.println(" ");

delay(500);

for(index=0 ; index <6 ; index++)

 {

 Serial.print(b[index]);

 }

 Serial.println(" ");

}

A computer screen shot of a computer

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**Task 2**

Write a program to control the LED on “Arduino 2” using SPDT switch on “Arduino 1” through UART communication.

**ARDUINO 1**

int SPDT =7;

void setup() {

 pinMode(SPDT,INPUT);

 Serial.begin(9600);

}

void loop() {

int button\_status = digitalRead(7);

Serial.write(button\_status);

}

**ARDUINO 2**

int LED = 4;

void setup() {

pinMode(LED,OUTPUT);

Serial.begin(9600);

}

int x =0;

void loop() {

if(Serial.available() > 0)

{x = Serial.read();

if (x == 1)

{digitalWrite(LED, HIGH);

}

else

{ digitalWrite(LED,LOW);

}}}

