LAB EXAM CIA – 2

Name: *Jeevan Koshy*

Roll No: *1740256*

```
#include <DHTesp.h> // including the libraries
#define dht_apin D3  // choosing the pin
DHTesp dht;  // making the variable
void setup() {  // starting the setup function
  Serial.begin(9600);   // setting the baud rate
  delay(500);  // setting a time interval
  Serial.print("Temperature & Humidity sensor");  //displaying message to the user
  Serial.println();  // printing a new line
  delay(1000);  // setting a delay
  dht.setup(dht_apin,DHTesp::DHT11);  //setting up the function with parameters of the pin
}
void loop() {
 float temp = dht.getTemperature();   // calling the temperature function
 float hum = dht.getHumidity();  // calling the humidity function
 Serial.print("Current Temperature is: ");  //displaying message to the user
 Serial.print(temp);   // printing the temperature
 Serial.println("C");   //displaying message to the user
 Serial.print("Current humidity is: ");  //displaying message to the user
 Serial.print(hum);   // printing the humidity
 Serial.println("%");   //displaying message to the user
 Serial.println();    // printing a new line
 delay(3500);   // setting a delay to run the loop again
 if(temp>26)
 {
  Serial.print("New Temperature is: ");   //displaying message to the user
  Serial.print(temp);   // printing the temperature
  Serial.println("C");   //displaying message to the user
```

```
 }
}
```

```
Current Temperature is: 26.00C
Current humidity is: 68.00%

Current Temperature is: 26.00C
Current humidity is: 69.00%

Current Temperature is: 27.00C
Current humidity is: 68.00%

New Temperature is: 27.00C
Current Temperature is: 27.00C
Current humidity is: 68.00%

New Temperature is: 27.00C
Current Temperature is: 27.00C
Current humidity is: 71.00%

New Temperature is: 27.00C
Current Temperature is: 26.00C
Current humidity is: 72.00%

Current Temperature is: 27.00C
Current humidity is: 74.00%
```

CIA_2

```
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DHTesp dht;  // making the variable
void setup() {  // starting the setup function
   Serial.begin(9600);   // setting the baud rate
   delay(500);  // setting a time interval
   Serial.print("Temperature & Humidity sensor");  //displaying message to the user
   Serial.println();  // printing a new line
   delay(1000);  // setting a delay
   dht.setup(dht_apin,DHTesp::DHT11);  //setting up the function with parameters of the pin
}
void loop() {
  float temp = dht.getTemperature();   // calling the temperature function
  float hum = dht.getHumidity();  // calling the humidity function
  Serial.print("Current Temperature is: ");  //displaying message to the user
  Serial.print(temp);   // printing the temperature
  Serial.println("C");   //displaying message to the user
  Serial.print("Current humidity is: ");  //displaying message to the user
  Serial.print(hum);   // printing the humidity
  Serial.println("%");   //displaying message to the user
  Serial.println();    // printing a new line
  delay(3500);   // setting a delay to run the loop again
  if(temp>26)
  {
    Serial.print("New Temperature is: ");   //displaying message to the user
    Serial.print(temp);   // printing the temperature
    Serial.println("C");   //displaying message to the user
  }
}
```

Done Saving.

```
Writing at 0x00028000... (91 %)
Writing at 0x0002c000... (100 %)
Wrote 268928 bytes (195918 compressed) at 0x00000000 in 17.3 seconds (effective 124.3 kbit/s)...
Hash of data verified.
```
