

Experiment No. 12

Title: Write a program to show the temperature and
Shows a graph of the recent measurements.

Roll No: SA&DC75 Batch: S9

Date of Performance: __ _ / __ _ / __ _ _ _ _

Date of Assessment: __ _ / __ _ / __ _ _ _ _

Particulars	Marks
Attendance (05)	
Journal (05)	
Performance (05)	
Understanding (05)	
Total (20)	
Signature of Staff Member	

Program:-

```
#include <SoftwareSerial.h>
SoftwareSerial bt(8, 9); // RX, TX

#include "dht.h"
#define dataPin A0

dht DHT;
int i = 0;
int temp;
int hum;

void setup() {

  Serial.begin(9600);
  bt.begin(9600);
  Serial.println("Ready");

  delay(2000);

  pinMode(13, OUTPUT);

}

void loop(){
  int readData = DHT.read11(dataPin);

  hum = DHT.humidity;
  temp = DHT.temperature;

  Serial.println();

  Serial.println(hum);
  Serial.print("Humidity: ");

  Serial.print(",");

  Serial.print("Temp: ");
  Serial.println(temp);
  Serial.print("o"); //degree symbol
  Serial.print("C ");
  Serial.print(",");

  bt.print(temp); //send distance to MIT App
  bt.print(",");
  bt.print(hum); //send distance to MIT App
  bt.println(",");
```

```
if(temp> 31)
{
    digitalWrite(13, HIGH); // turn the LED on (HIGH is the voltage level)
    delay(1000);           // wait for a second
}
else
{
    digitalWrite(13, LOW); // turn the LED on (HIGH is the voltage level)
    delay(1000);           // wait for a second
}

delay(1000);
}
```

Diagram:-

