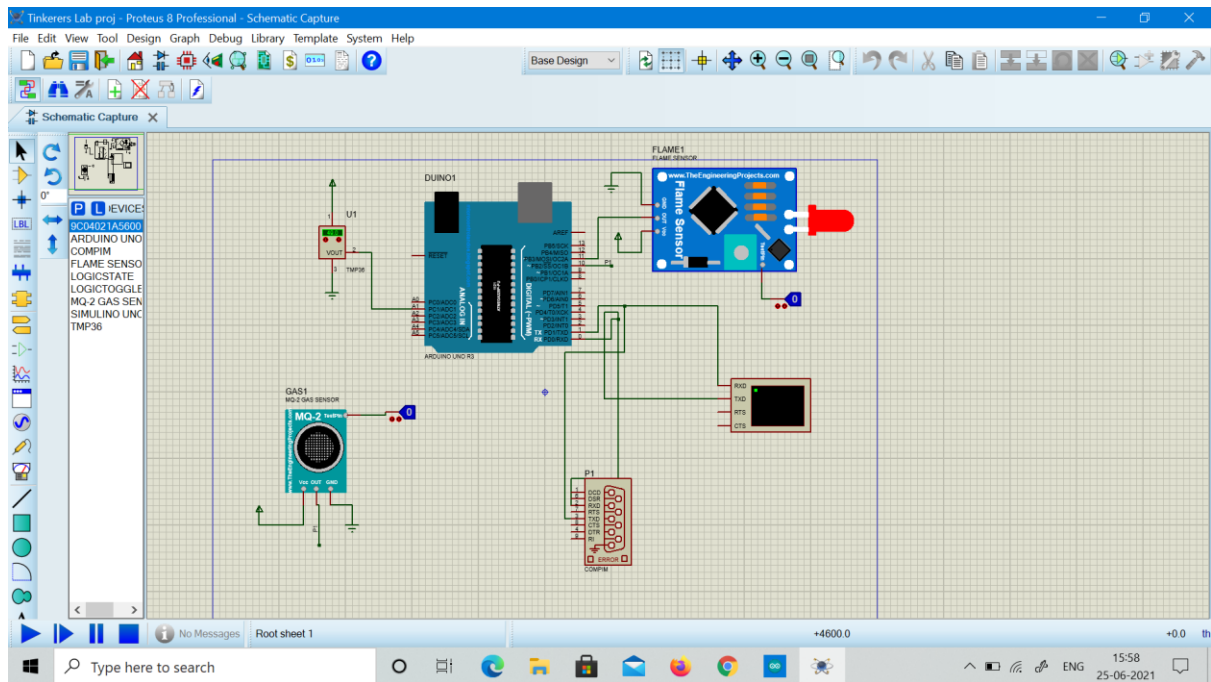


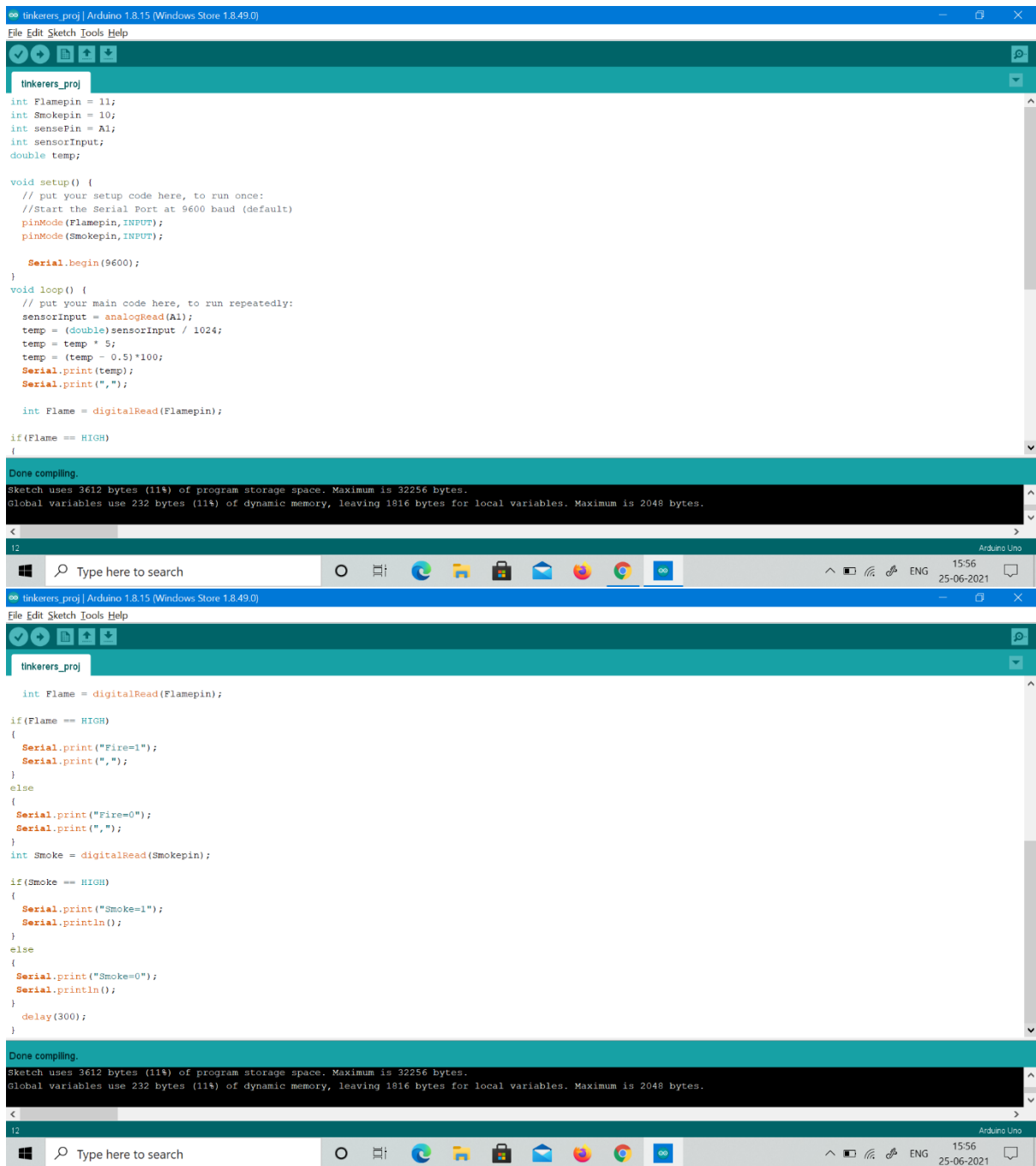
TASK 2 and TASK 3

Prashanth S.A.



TASK 2 and TASK 3

Prashanth S.A.



```
tinkers_proj | Arduino 1.8.15 (Windows Store 1.8.49.0)
File Edit Sketch Tools Help

tinkers_proj
int Flamepin = 11;
int Smokepin = 10;
int sensePin = A1;
int sensorInput;
double temp;

void setup() {
  // put your setup code here, to run once:
  //Start the Serial Port at 9600 baud (default)
  pinMode(Flamepin, INPUT);
  pinMode(Smokepin, INPUT);

  Serial.begin(9600);
}

void loop() {
  // put your main code here, to run repeatedly:
  sensorInput = analogRead(A1);
  temp = (double)sensorInput / 1024;
  temp = temp * 5;
  temp = (temp - 0.5)*100;
  Serial.print(temp);
  Serial.print(",");

  int Flame = digitalRead(Flamepin);

  if(Flame == HIGH)
  {
    Done compiling.
    Sketch uses 3612 bytes (11% of program storage space. Maximum is 32256 bytes.
    Global variables use 232 bytes (11% of dynamic memory, leaving 1816 bytes for local variables. Maximum is 2048 bytes.
  }

  int Flame = digitalRead(Flamepin);

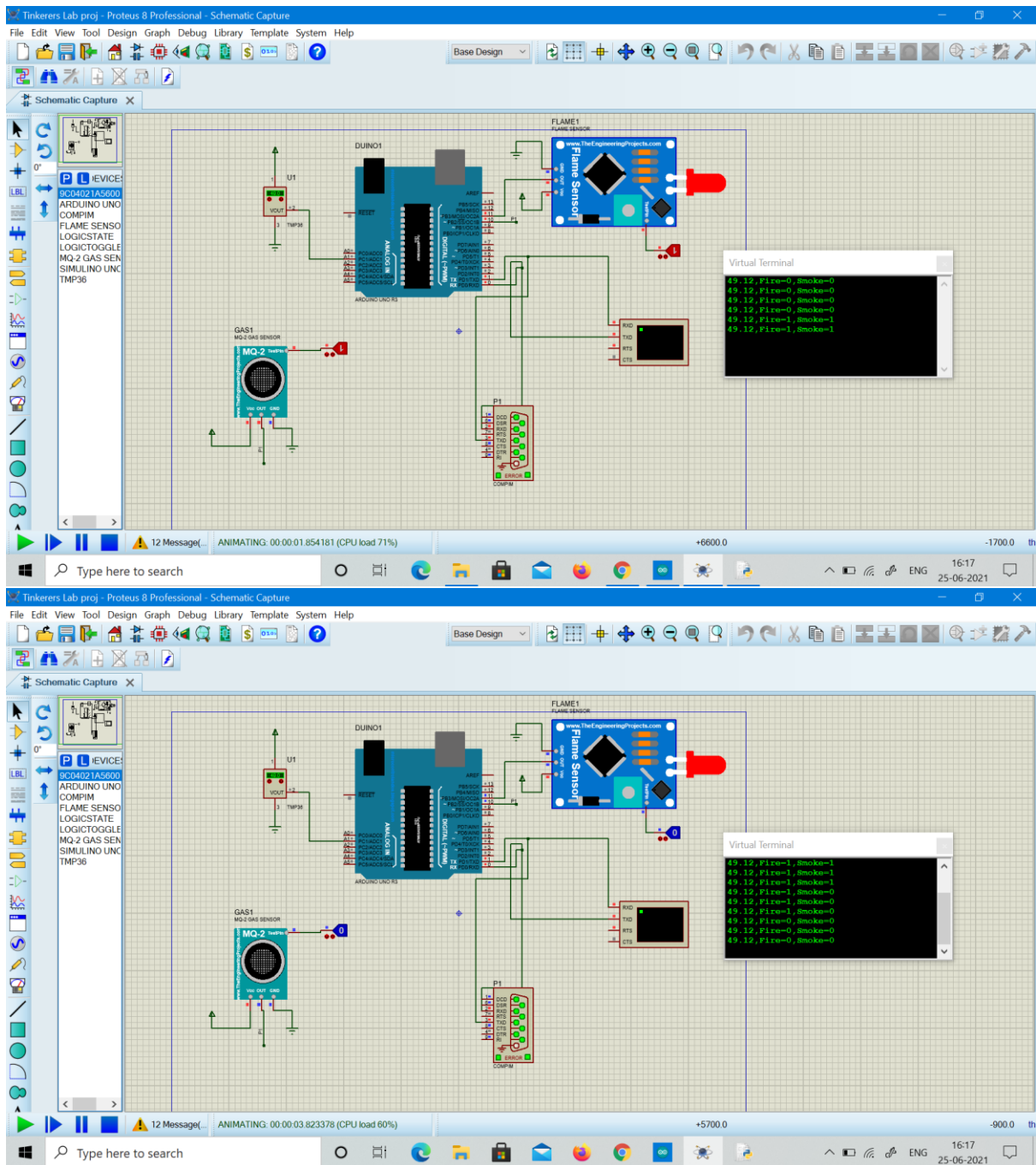
  if(Flame == HIGH)
  {
    Serial.print("Fire=1");
    Serial.print(",");
  }
  else
  {
    Serial.print("Fire=0");
    Serial.print(",");
  }
  int Smoke = digitalRead(Smokepin);

  if(Smoke == HIGH)
  {
    Serial.print("Smoke=1");
    Serial.println();
  }
  else
  {
    Serial.print("Smoke=0");
    Serial.println();
  }
  delay(300);
}

Done compiling.
Sketch uses 3612 bytes (11% of program storage space. Maximum is 32256 bytes.
Global variables use 232 bytes (11% of dynamic memory, leaving 1816 bytes for local variables. Maximum is 2048 bytes.
```

TASK 2 and TASK 3

Prashanth S.A.



TASK 2 and TASK 3

Prashanth S.A.

The image displays two screenshots of the Firebase console interface, specifically the Realtime Database section for the 'IoT project'.

Top Screenshot: Shows the 'Data' tab with a tree view of the database structure. The root node is 'iot-project-1592f-default-rtdb', which contains three child nodes: 'Flame_detection', 'Smoke_detection', and 'Temperature_data'. The URL bar shows 'https://iot-project-1592f-default-rtdb.firebaseio.com/'.

Bottom Screenshot: Shows the 'Data' tab with the 'Flame_detection' node selected. It displays a list of three data points (0, 1, 2) with the following structure:

```
Flame_detection
├── 0
│   ├── date: "2021-06-25"
│   ├── reading: "Fire=0"
│   └── time: "16:08"
├── 1
│   ├── date: "2021-06-25"
│   ├── reading: "Fire=0"
│   └── time: "16:08"
└── 2
    ├── date: "2021-06-25"
    ├── reading: "Fire=0"
    └── time: "16:08"
```

The URL bar shows 'https://iot-project-1592f-default-rtdb.firebaseio.com/'.

TASK 2 and TASK 3

Prashanth S.A.

The image displays two screenshots of the Firebase Realtime Database console, showing data for a project named 'IoT project'.

Top Screenshot: The console shows the 'Data' tab for the database 'iot-project-1592f-default-rtdb'. The URL is `https://iot-project-1592f-default-rtdb.firebaseio.com/`. The data is structured as follows:

- `0`:
 - `date`: "2021-06-25"
 - `reading`: "Fire=0"
 - `time`: "16:08"
- `2`:
 - `date`: "2021-06-25"
 - `reading`: "Fire=0"
 - `time`: "16:08"
- `3`:
 - `date`: "2021-06-25"
 - `reading`: "Fire=0"
 - `time`: "16:08"

Below the data, there are two sections: `Smoke_detection` and `Temperature_data`.

Bottom Screenshot: The console shows the 'Data' tab for the database 'iot-project-1592f-default-rtdb'. The URL is `https://iot-project-1592f-default-rtdb.firebaseio.com/`. The data is structured as follows:

- `Smoke_detection`:
 - `0`:
 - `date`: "2021-06-25"
 - `reading`: "Smoke=0"
 - `time`: "16:08"
 - `1`:
 - `date`: "2021-06-25"
 - `reading`: "Smoke=0"
 - `time`: "16:08"
 - `2`:
 - `date`: "2021-06-25"
 - `reading`: "Smoke=0"
 - `time`: "16:09"

At the bottom, it indicates the database location: United States (us-central1).

TASK 2 and TASK 3

Prashanth S.A.

The image displays two screenshots of the Firebase Realtime Database console, showing the 'Temperature_data' node in a Realtime Database. The console interface includes a sidebar with navigation options like Project Overview, Build, and Release & Monitor. The main area shows the database structure with a tree view of the 'Temperature_data' node.

Top Screenshot: The 'Temperature_data' node is expanded, showing three entries (0, 1, 2) with the following data:

- Entry 0: date: "2021-06-25", reading: "Smoke=0", time: "16:08"
- Entry 1: date: "2021-06-25", reading: "Smoke=0", time: "16:09"
- Entry 2: date: "2021-06-25", reading: "Smoke=0", time: "16:09"

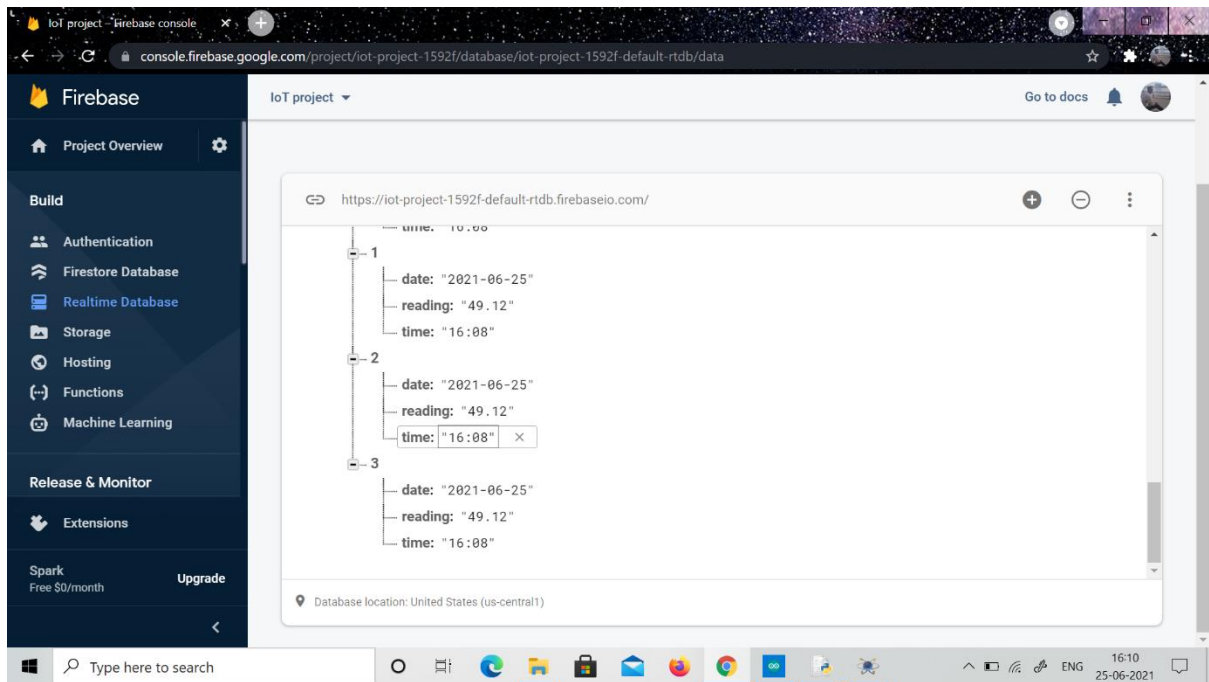
Bottom Screenshot: The 'Temperature_data' node is expanded, showing three entries (0, 1, 2) with the following data:

- Entry 0: date: "2021-06-25", reading: "49.12", time: "16:08"
- Entry 1: date: "2021-06-25", reading: "49.12", time: "16:08"
- Entry 2: date: "2021-06-25", reading: "49.12", time: "16:08"

The database location is United States (us-central1).

TASK 2 and TASK 3

Prashanth S.A.



The screenshot displays the Firebase Realtime Database console for a project named 'IoT project'. The left sidebar shows the 'Build' section with options like Authentication, Firestore Database, Realtime Database, Storage, Hosting, Functions, and Machine Learning. The 'Realtime Database' option is selected. The main area shows a JSON tree structure with three data points, each containing 'date', 'reading', and 'time' fields. The URL bar shows the database path: `https://iot-project-1592f-default-rtdb.firebaseio.com/`. The database location is noted as 'United States (us-central1)'.

```
time: "16:08"
1
  date: "2021-06-25"
  reading: "49.12"
  time: "16:08"
2
  date: "2021-06-25"
  reading: "49.12"
  time: "16:08"
3
  date: "2021-06-25"
  reading: "49.12"
  time: "16:08"
```

Database location: United States (us-central1)