

### Assignment -1

Assignment Date	16th September 2022
Student Name	PRATEEK S
Student Roll Number	111519106120
Team Id	PNT2022TMID15034
Maximum Marks	2 Marks

**Code:**

```
void setup()

{

  Serial.begin(9600);

  pinMode(9, OUTPUT);

  pinMode(4, INPUT);

}

void loop()

{

  int tempdata=analogRead(0); int

  pirdata=digitalRead(4);

  Serial.println(tempdata);

  if(tempdata>60){ tone(9,3500,500);

  delay(1000);

}

  if(pirdata==1){

    tone(9,5000,500);

    delay(1000);

  }

  digitalWrite(9,LOW);

}
```

## Output:

The image displays two screenshots of the Tinkercad web interface, showing a circuit design and its corresponding code.

**Top Screenshot:** The circuit features an Arduino Uno connected to a breadboard. A potentiometer is connected to the 5V pin (red), ground (black), and a wiper pin (yellow). A pushbutton is connected to the 5V pin (red) and ground (black). A temperature sensor (TMP) is connected to the 5V pin (red) and ground (black). The code in the Text editor is as follows:

```
1 void setup()
2 {
3   Serial.begin(9600);
4   pinMode(9, OUTPUT);
5   pinMode(4, INPUT);
6 }
7
8 void loop()
9 {
10  int tempdata=analogRead(0);
11  int pirdata=digitalRead(4);
12  Serial.println(tempdata);
13  if(tempdata>60){
14    tone(9,3500,500);
15    delay(1000);
16  }
17  if(pirdata==1){
18    tone(9,5000,500);
19    delay(1000);
20  }
21  digitalWrite(9,LOW);
22 }
```

**Bottom Screenshot:** The same circuit is shown, but with a fan added to the breadboard. The fan is connected to the 5V pin (red) and ground (black). The code remains the same as in the top screenshot.