

Assignment -1

Problem Statement :

IoT-Based Industry - Real-Time River Water Quality
Monitoring and Control System

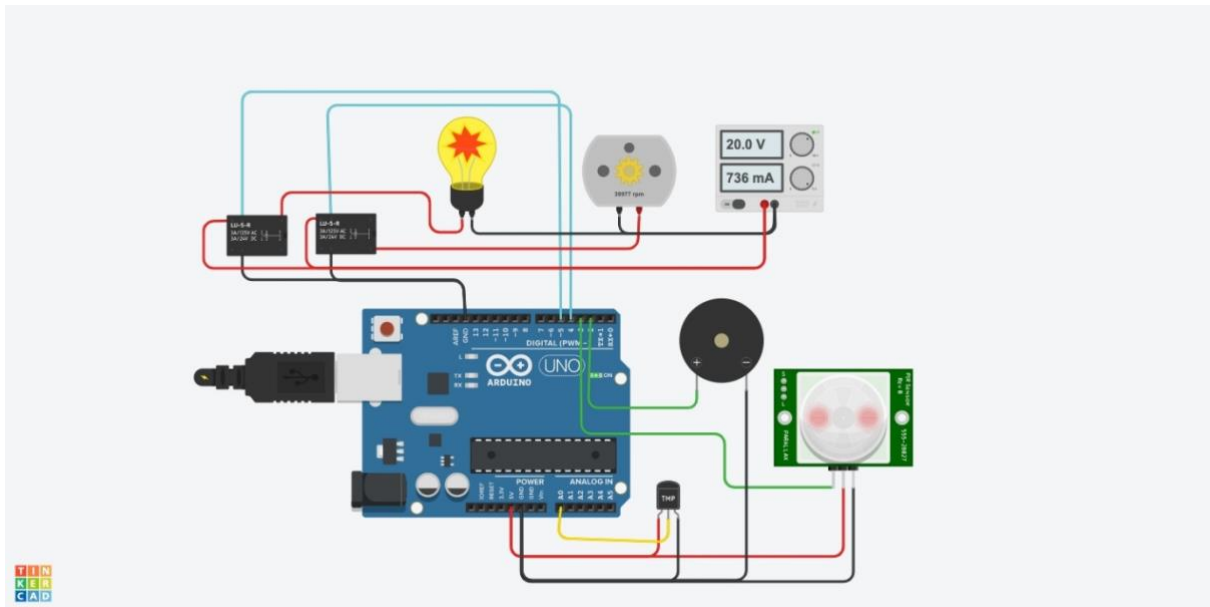
Domain: Internet of Things

Assignment Date	15 September 2022
Student Name	SWETHA R
Student Roll Number	814719106061
Maximum Marks	2 Marks

Assignment 1: Circuit design Home automation system in TinkerCad.

<https://www.tinkercad.com/things/gusp6clvTVP>

Circuit diagram :



Program:

Arduino Uno Code :

```
#define buzzer    2
#define pir       3
#define motor     4
#define light     5
#define temp      A0

void setup()
{
    pinMode(pir, INPUT);
    pinMode(temp, INPUT);
    pinMode(buzzer, OUTPUT);
    pinMode(light, OUTPUT);
    pinMode(motor, OUTPUT);
    Serial.begin(9600);
}

void loop()
{
    if(digitalRead(pir)==HIGH)
    {
        digitalWrite(light,HIGH);
        digitalWrite(motor,HIGH);
    }

    else
    {
        digitalWrite(light,LOW);
        digitalWrite(motor,LOW);
    }

    if(analogRead(temp)>200)
    {
        Serial.print("high temperature alert");
        digitalWrite(buzzer,HIGH);
        delay(500);
        digitalWrite(buzzer,LOW);
        delay(400);
    }
}
```