Assignment -1

Problem Statement :

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

Domain: Internet of Things

Assignment Date	15 September 2022
Student Name	KOUSHIKKARAN K
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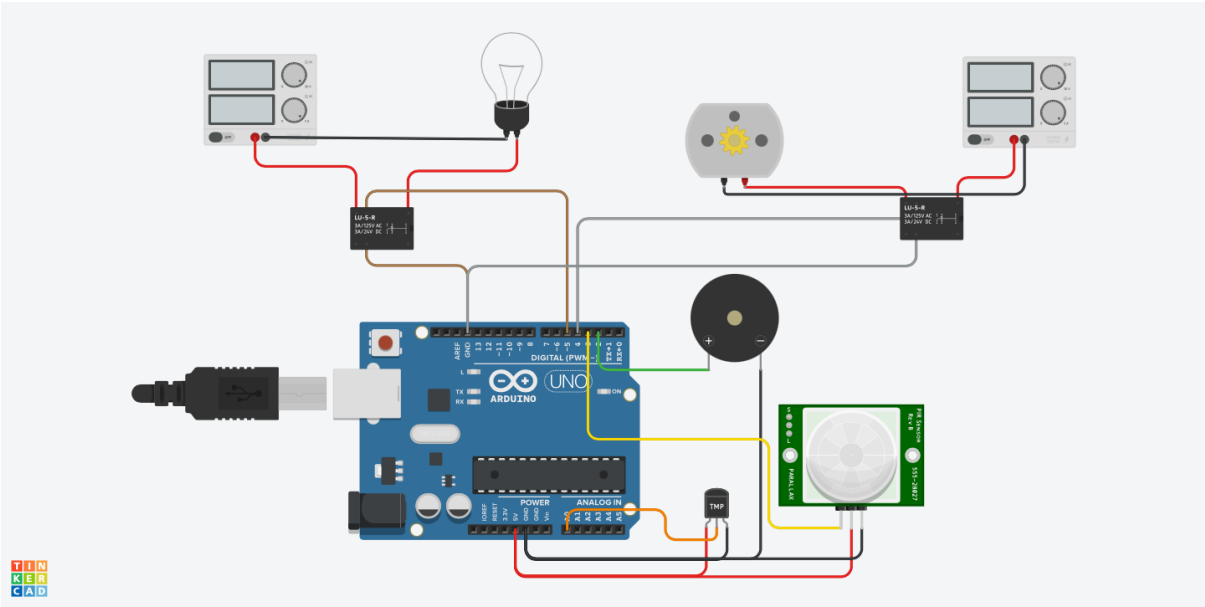
Maximum Marks	2 Marks

Assignment 1: Circuit design Home automation system in TinkerCad.

https://www.tinkercad.com/things/drJnZZav5kP?sharecode=GIiLpei_PBvUoxfnvr0qbK7JkXlk1c0kuDUhGm9U4rM

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);
  }
X}
```