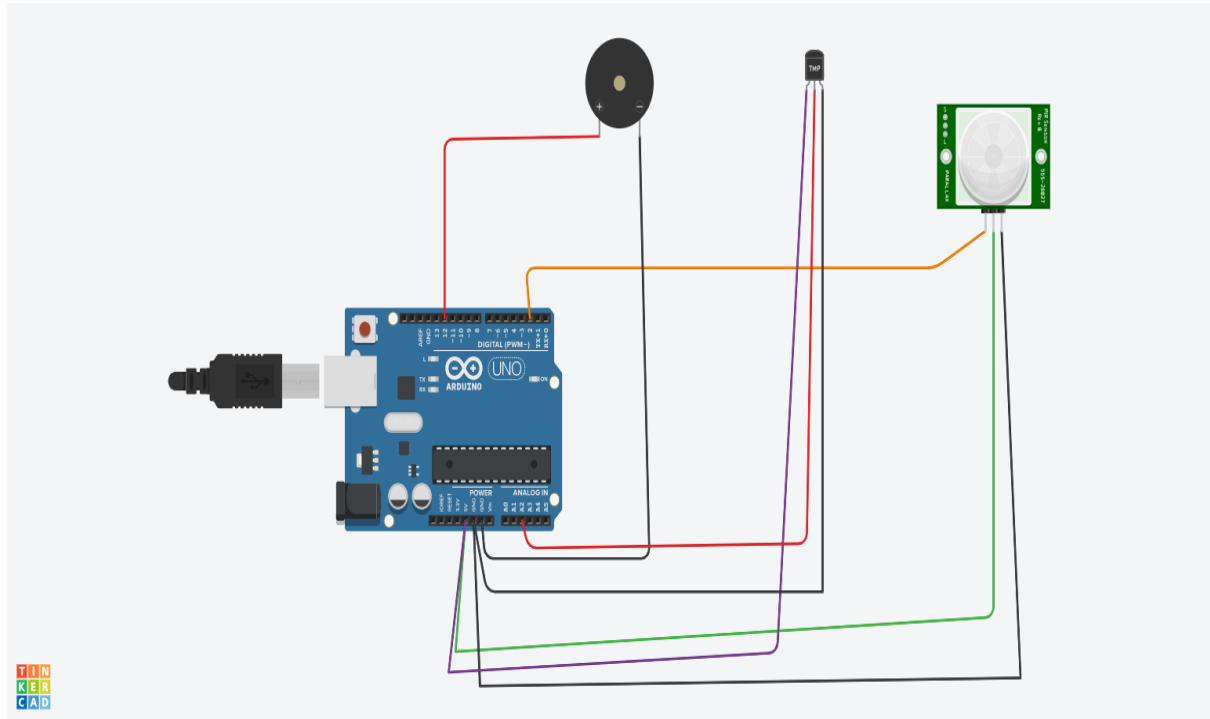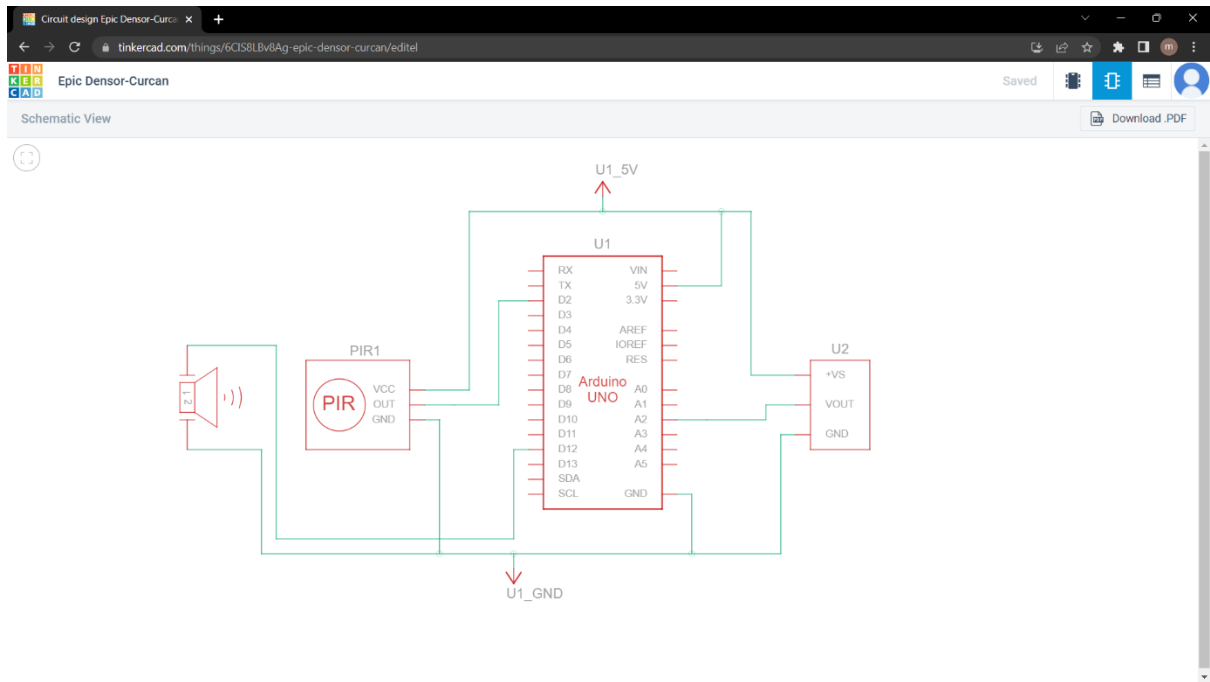# IBM ASSIGNMENT

CREATE CIRCUIT WITH PIEZO ALARM,PIR SENSOR,TEMPERATURE SENSOR:

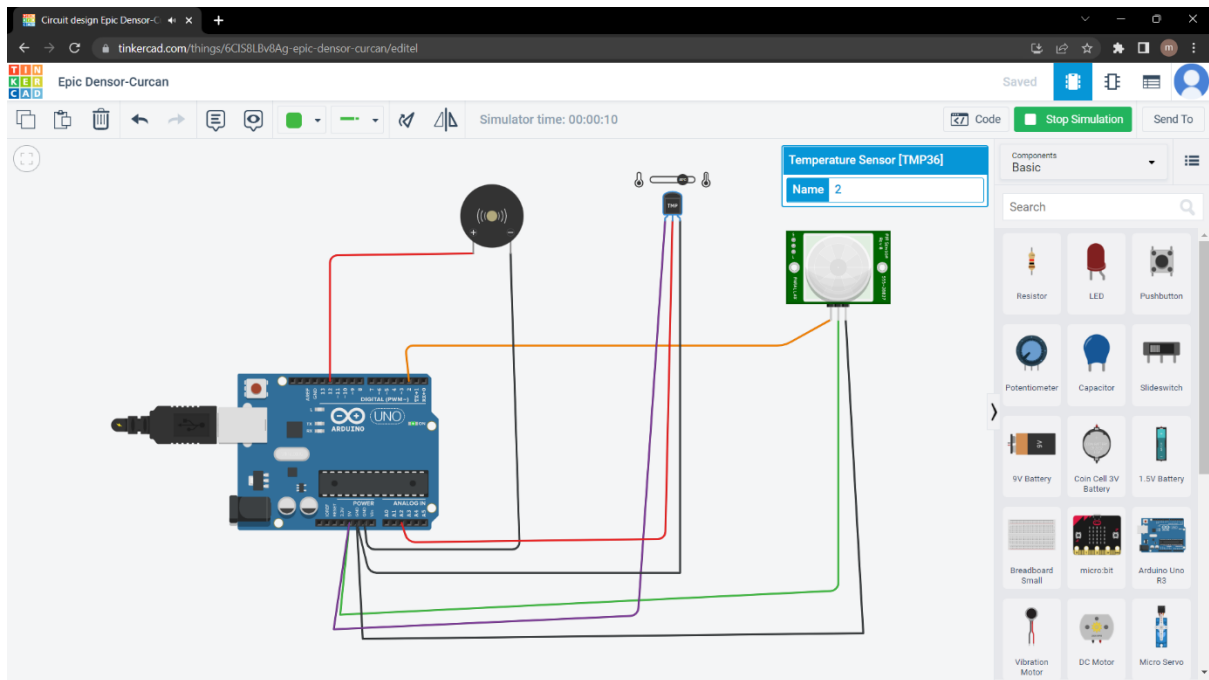# CIRCUIT DIAGRAM:

SCHEMATIC DIAGRAM:

SOURCE CODE:

```cpp
// C++ code
//
void setup()
{
  Serial.begin(9600);
  pinMode(2, INPUT);
  pinMode(12, OUTPUT);
}

void loop()
{
  int motion=digitalRead(2);
  if(motion==1)
  {
    Serial.println("Motion is Detected !");
    tone(12,10);
    delay(1000);
```

```
    noTone(12);
    delay(3000);
}
else
{
  Serial.println("No Motion!!!");
  delay(1000);
}
double data=analogRead(A2);
double n=data/1024;
double voltage=n*5;
double offsetvol=voltage-0.5;
double temp=offsetvol*100;
if(temp>60)
{
  Serial.println("Temperature higher than 60 degrees !!");
  Serial.println(temp);
  tone(12,10);
  delay(1000);
  noTone(12);
```

```
    delay(3000);
  }
  else
  {
    Serial.println("Temperature lesser than 60 degrees !!");
    Serial.println(temp);
    delay(1000);
  }
}
```

TEMP SENSOR:

PIR SENSOR: