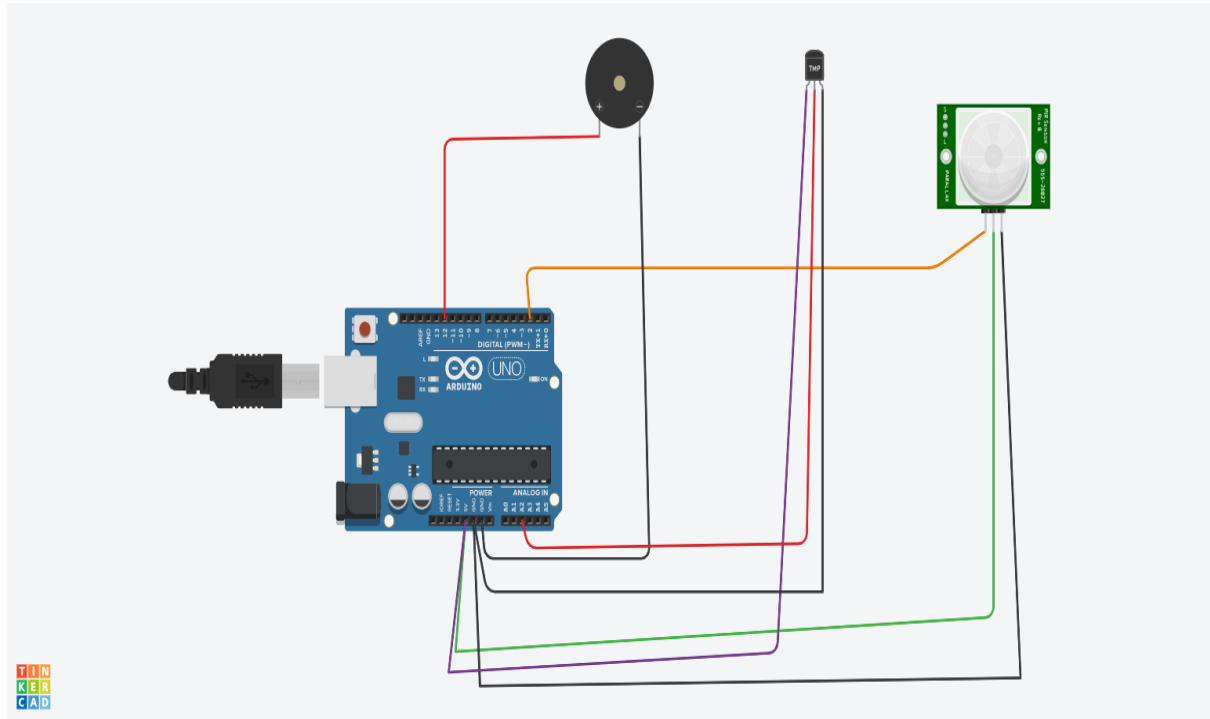


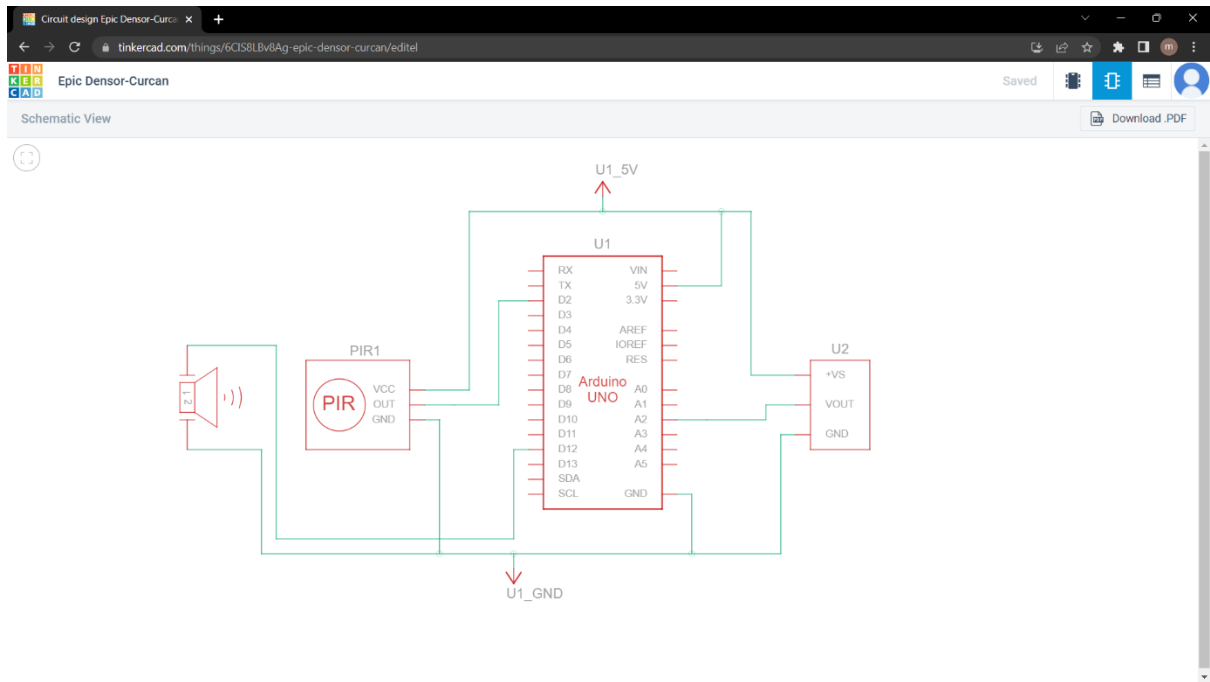
IBM ASSIGNMENT

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

CIRCUIT DIAGRAM:



SCHEMATIC DIAGRAM:



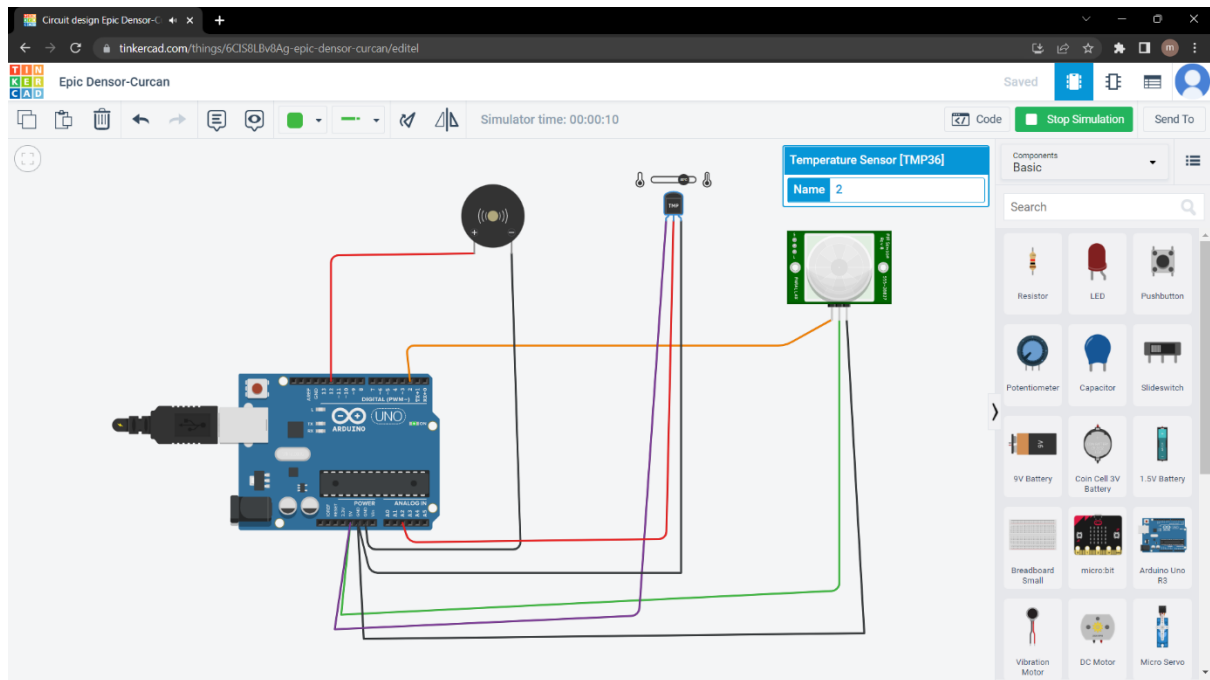
SOURCE CODE:

```
// 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:

