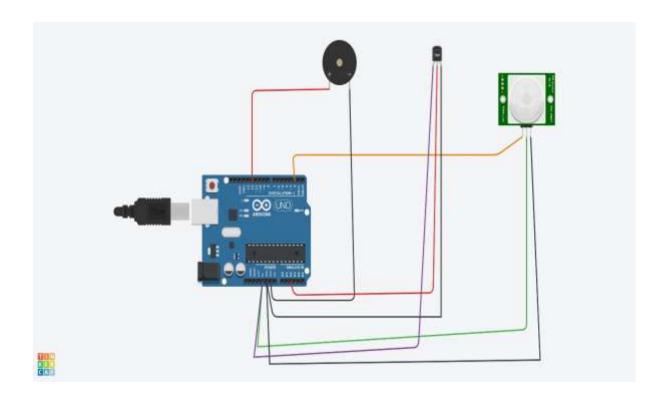
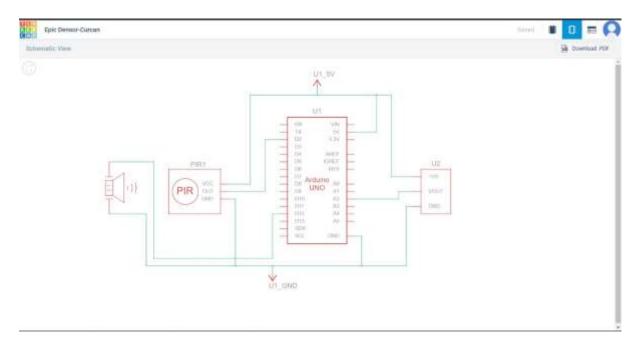
IBM ASSIGNMENT

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

CIRCUIT DIAGRAM:



SCHEMATIC DIAGRAM:

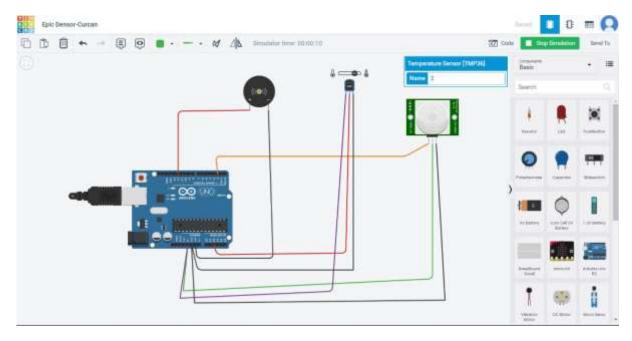


Source code:

```
// C++ code
//
void setup()
 Serial.begin(9600);
pinMode(2, INPUT);
pinMode(12, OUTPUT);
void loop() {
motion=digitalRead(2);
if(motion==1)
 {
  Serial.println("Motion is Detected !");
tone(12,10);
              delay(1000);
              delay(3000);
noTone(12);
 }
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:

