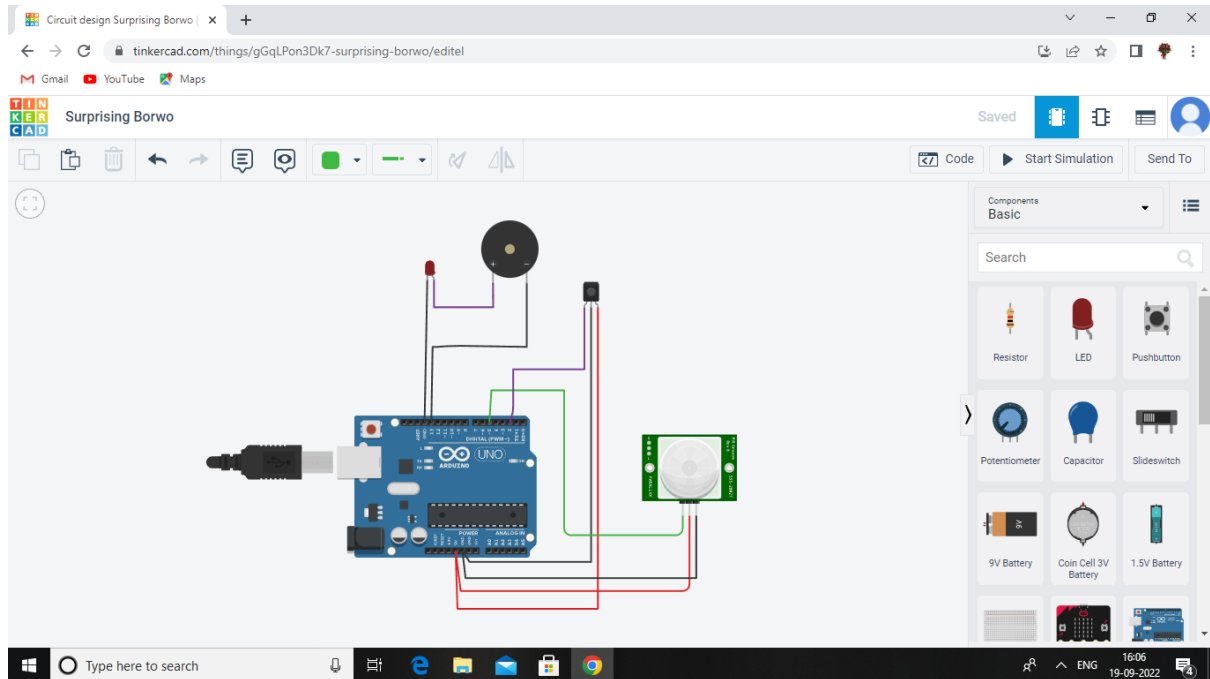# ASSIGNMENT 1

Circuit Diagram:

Code:

```cpp
// C++ code
//
void setup()
{
  pinMode(5,INPUT);
  Serial.begin(9600);
  pinMode(2,INPUT);
```

```cpp
  Serial.begin(9600);

  pinMode(13,OUTPUT);

}

void loop(){

{

  int m=digitalRead(5);

  Serial.print("motion detected:");

  Serial.println(m);

  if(m == 1)

  {

  int m=digitalRead(2);

    Serial.print("IRsensor detected:");

      Serial.println(m);

    if(m == 1)

  {

   Serial.println("yes");

   digitalWrite(13,HIGH);

  }

  else

  {

   Serial.println("no");

     digitalWrite(13,LOW);
```

```
        }



    }

  }

}
```

Output: