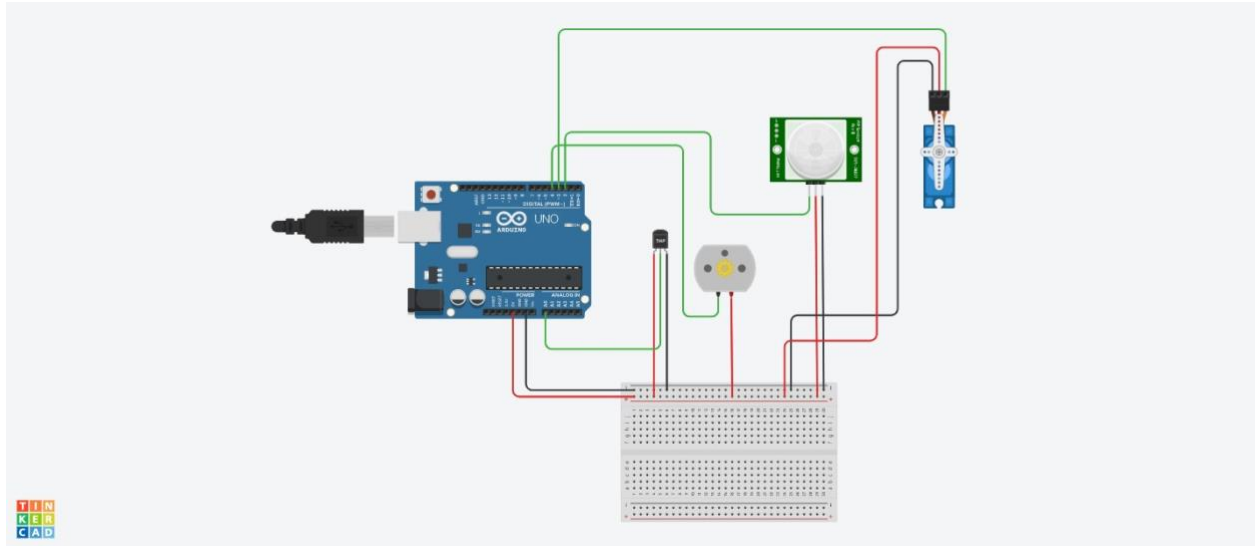# Assignment 1

Circuit Diagram

Program

```
#include <Servo.h>
Servo s;
 void setup()
{
 pinMode(4, OUTPUT);
 pinMode(2, INPUT);
 s.attach(3);
}
 void loop()
{
 s.write(0);
  int pir = digitalRead(2);
 double a = analogRead(A0);   double t
= (((a / 1024) * 5) - 0.5) * 100;
 if(pir){
   s.write(180);
   delay(5000);
```

```
  }
  if(t > 35)
digitalWrite(4, 0);
    else
    digitalWrite(4, 1);
}
```