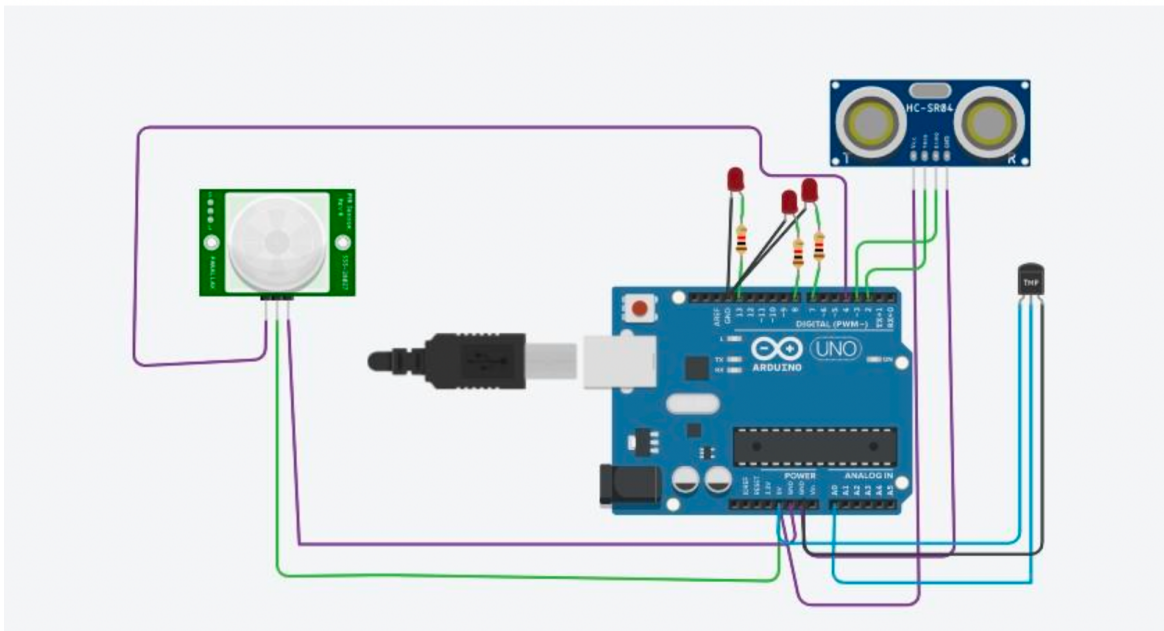


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BE ECE C
SKCT

Assignment 1



Code for the circuit:

```
int t=2;  
  
int e=3;  
  
int l=13;  
  
void setup()  
{ pinMode(t,OUTPUT); pinMode(8,OUTPUT);  
  pinMode(7,OUTPUT); pinMode(e,INPUT); pinMode(l,OUTPUT);  
  Serial.begin(9600);
```

```
}  
  
void loop()  
  
{  
  digitalWrite(8,0); int a=digitalRead(4);  
  Serial.println(a);  
  if(a==1)  
  {  
    digitalWrite(8,1); Serial.println("Motion detected!!!"); }  
    delay(1000);  
    digitalWrite(t,0);  
    digitalWrite(t,1); delayMicroseconds(10); digitalWrite(t,0);  
    float dur=pulseIn(e,HIGH);  
    int dis=(dur*0.0343)/2; analogWrite(l,map(dis,2,320,255,0));  
    double b=analogRead(A0);  
    double t=((b/1024)*5)-0.5)*100; Serial.print("temperature value:  
"); Serial.println(t);  
    if(t>100)  
    digitalWrite(7,1);  
    else  
    digitalWrite(7,0); delay(1000); delay(1000);  
  }  
}
```

