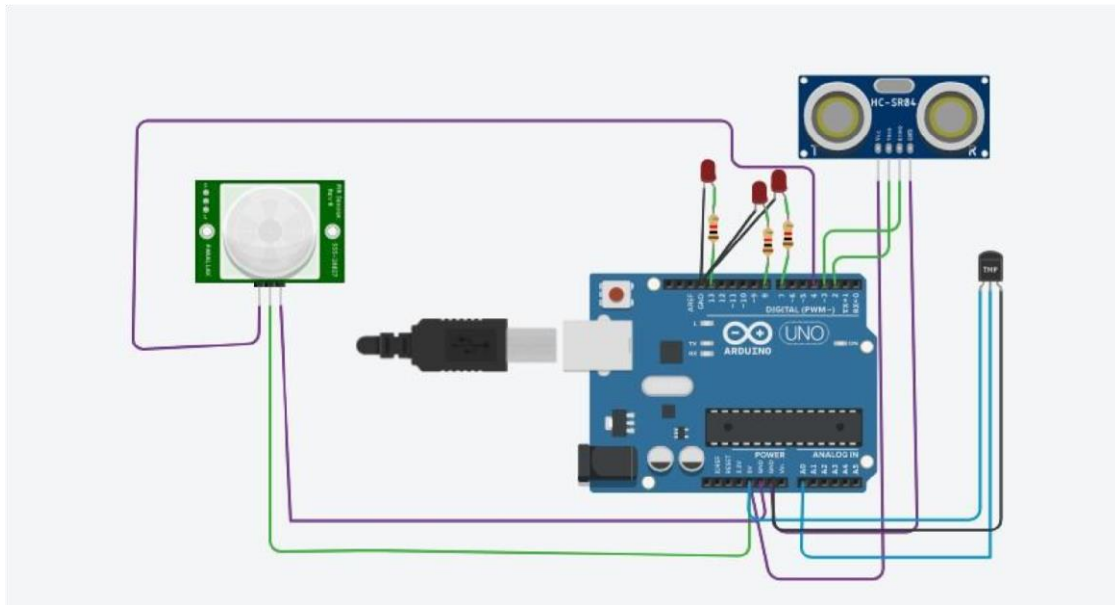


Assignment 1



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);

}
```

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