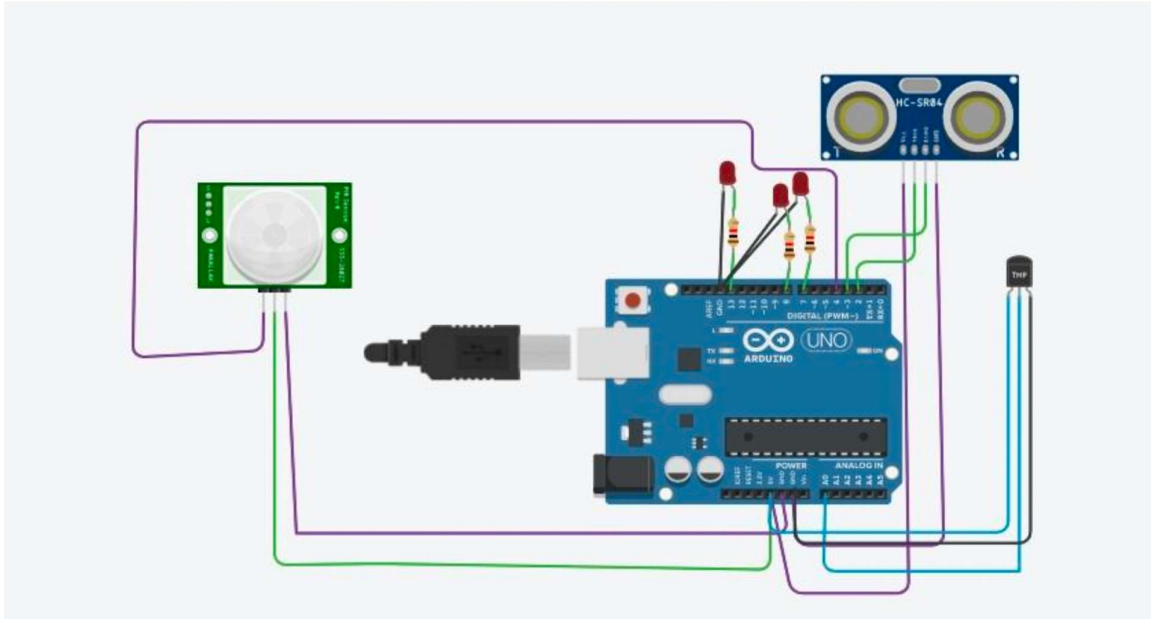


KIRUBASANKAR R
KPRIET

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);

```

}

