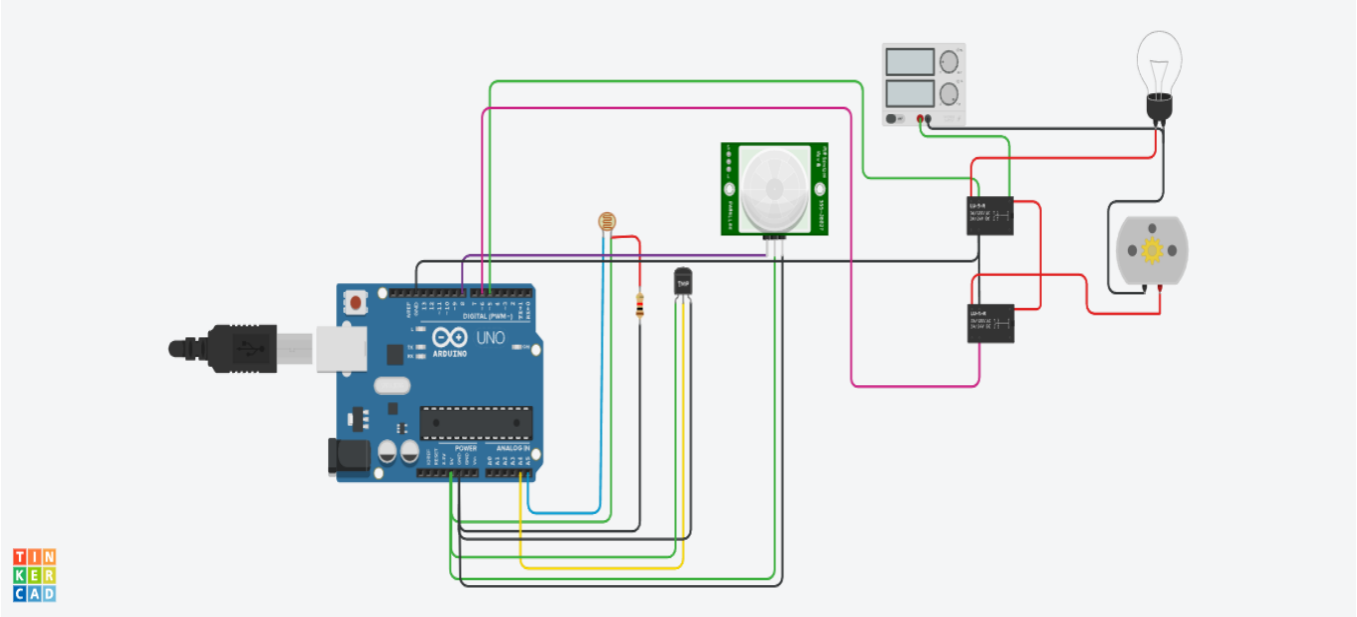
# SMART HOME

**COMPONENTS USED:**

- Arduino
- PIR sensor
- DC motor
- Light bulb
- Temperature sensor
- Photoresistor
- Relaly

**CIRCUIT DIAGRAM:**




**CODE:**

```
 float signal,terminal1,vout,temp;

void setup()

{
```

```
  pinMode(8,INPUT);
  pinMode(A5,INPUT);
  pinMode(A4,INPUT);
  pinMode(5,OUTPUT);
  pinMode(6,OUTPUT);
  Serial.begin(9600);
}
void loop()
{
  signal=digitalRead(8);
  terminal1=analogRead(A5);
  vout=analogRead(A4);
  Serial.println(signal);
  delay(2000);
  Serial.println(terminal1);
  delay(2000);
  Serial.println(vout);
  delay(2000);
  temp=(double)vout/1024;
  temp=temp*5;
  temp=temp-0.5;
  temp=temp*100;
```

```
if(signal>0)
{
 if((terminal1<550)&&(temp>30))
 {
  digitalWrite(5,HIGH);
  digitalWrite(6,HIGH);
 }
 else if((terminal1<550)&&(temp<30))
 {
  digitalWrite(5,HIGH);
  digitalWrite(6,LOW);
 }
 else if((terminal1>550)&&(temp>30))
 {
  digitalWrite(5,LOW);
  digitalWrite(6,HIGH);
 }
 else if((terminal1>550)&&(temp<30))
 {
  digitalWrite(5,LOW);
  digitalWrite(6,LOW);
 }
```

```
  }
  else
   {
     digitalWrite(5,LOW);
     digitalWrite(6,LOW);
   }
}
```

**SIMULATION:**