

Assignment -1

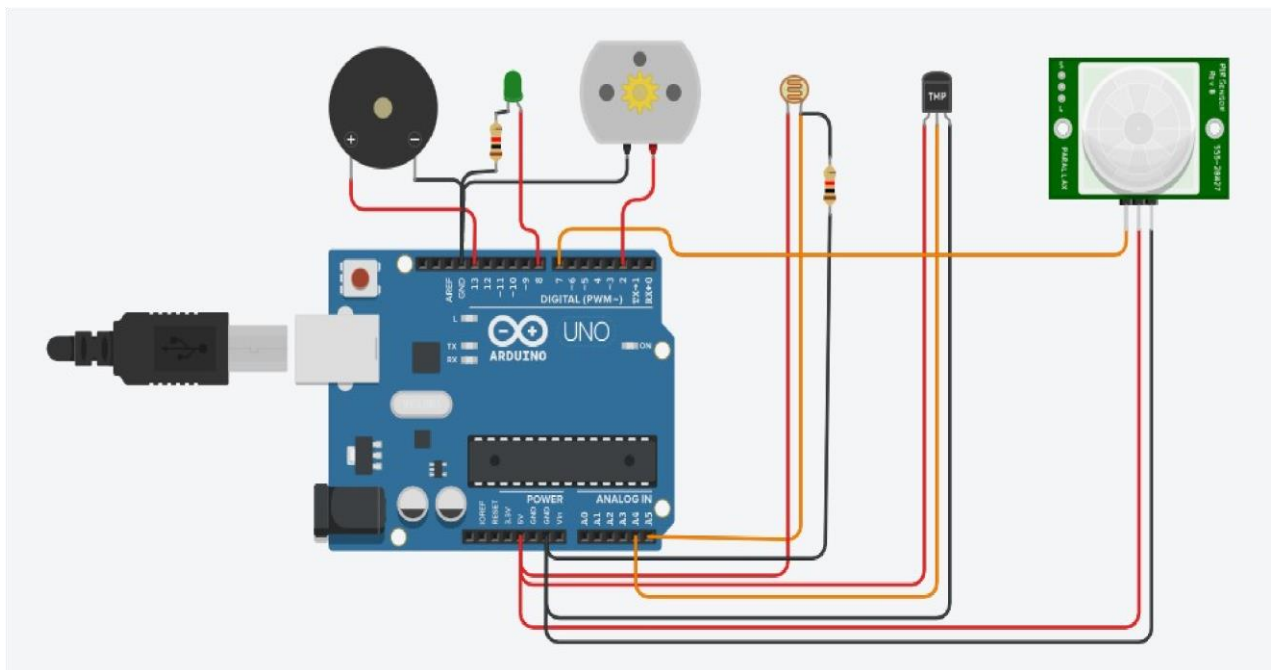
Assignment Date	16/11/2022
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Question:

To create a smart home using arduino in tinkercad. (Note: Use Minimum 2-3 sensors and an LED and Buzzer)

Solution:

Circuit Diagram:



Code:

```
// C++ code
//
float x,y,z,temp; void
setup()
{
  Serial.begin(9600); pinMode(2,
  OUTPUT); pinMode(7, INPUT);
  pinMode(8, OUTPUT); pinMode(13,
```

```

OUTPUT); pinMode(A4, INPUT);
pinMode(A5, INPUT);
}
void loop()
{ x=analogRead(A5);
y=analogRead(A4);
z=digitalRead(7); temp =
(double)y / 1024;    temp =
temp * 5;           temp =
temp - 0.5;         temp =
temp * 100; if(x<=550)
{
    digitalWrite(8, HIGH);
Serial.println(x);  delay(1000);
    Serial.println("Room is Dark.....Light's ON");  delay(1000);
} else
{
    digitalWrite(8, LOW);
Serial.println(x);  delay(1000);
    Serial.println("Room is Light.....Light's OFF");  delay(1000);
}
if(temp>=30)
{  digitalWrite(2, HIGH);
Serial.println(temp);
delay(1000);
    Serial.println("Temperature is High.....Fan ON");  delay(1000);
} else
{
    digitalWrite(2, LOW);
Serial.println(temp);  delay(1000);
    Serial.println("Temperature is Low.....Fan OFF");  delay(1000);
} if(z>0)
{

```

```
digitalWrite(13, HIGH);  
Serial.println(z);  
Serial.println("Someone is Entered.....");  
} else  
{  
    digitalWrite(13, LOW);  
    Serial.println(z);  
    Serial.println("No one is there.....");  
}  
}
```

Tinkercad Link:

[https://www.tinkercad.com/things/7G7NGHyALOr-brave-kup-curcan/editel?
sharecode=O7IHSdwPV7uu2-IGbmFMoruW9nmADd1tzGRPjCP5LXE](https://www.tinkercad.com/things/7G7NGHyALOr-brave-kup-curcan/editel?sharecode=O7IHSdwPV7uu2-IGbmFMoruW9nmADd1tzGRPjCP5LXE)