Assignment -1
HOME AUTOMATION

Question-1: smart home automation designs provide an unprecedented level of comfort and convenience in Melbourne homes, delivering you a personalised and innovative room experience.
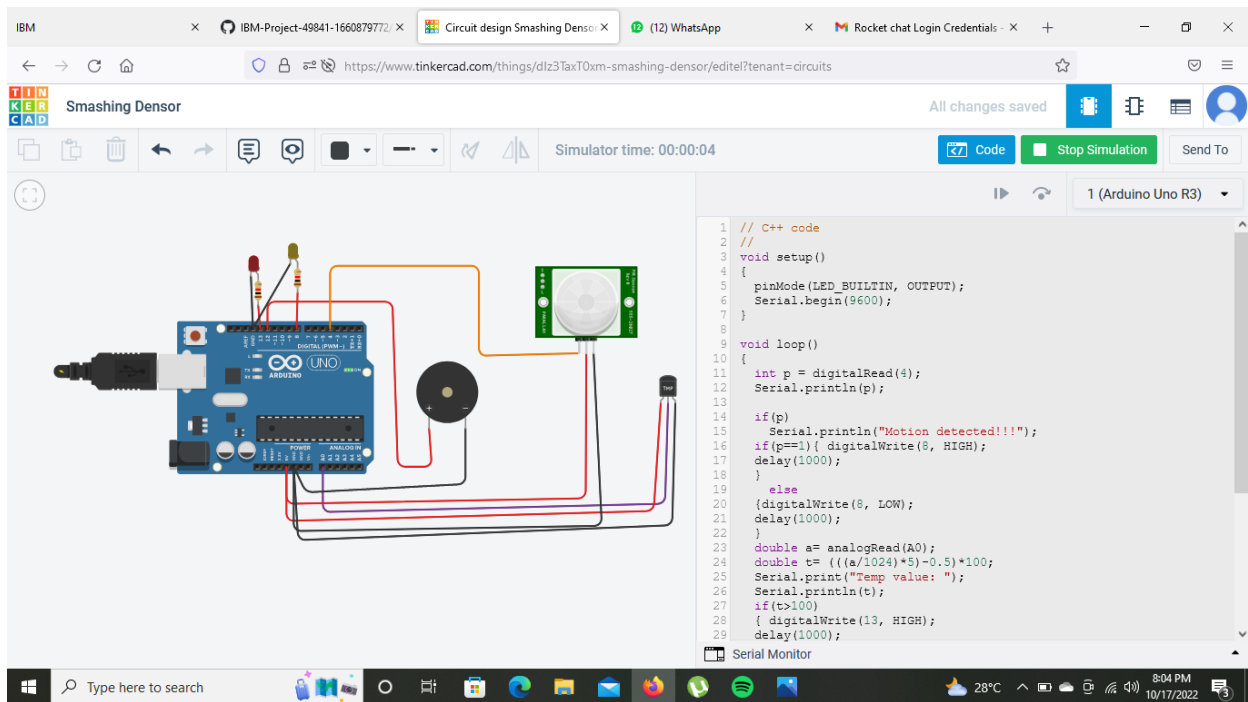
Solution:
```
void setup()
{
  pinMode(LED_BUILTIN, OUTPUT);
  Serial.begin(9600);
}

void loop()
{
  int p = digitalRead(4);
  Serial.println(p);

  if(p)
    Serial.println("Motion detected!!!");
  if(p==1){ digitalWrite(8, HIGH);
  delay(1000);
  }
    else
  {digitalWrite(8, LOW);
  delay(1000);
  }
  double a= analogRead(A0);
  double t= (((a/1024)*5)-0.5)*100;
  Serial.print("Temp value: ");
  Serial.println(t);
  if(t>100)
  { digitalWrite(13, HIGH);
  delay(1000);
   tone(12, 131);
    delay(250);
    noTone(12);
    delay(125);
  }
  else
```

```
{digitalWrite(13, LOW);
delay(1000);
}

delay(1000);
}
```

```cpp
// C++ code
//
void setup()
{
  pinMode(LED_BUILTIN, OUTPUT);
  Serial.begin(9600);
}

void loop()
{
  int p = digitalRead(4);
  Serial.println(p);

  if(p)
    Serial.println("Motion detected!!!");
  if(p==1){ digitalWrite(8, HIGH);
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  }
    else
  {digitalWrite(8, LOW);
  delay(1000);
  }
  double a= analogRead(A0);
  double t= (((a/1024)*5)-0.5)*100;
  Serial.print("Temp value: ");
  Serial.println(t);
  if(t>100)
  { digitalWrite(13, HIGH);
  delay(1000);
```

Submitted By;

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