Assignment-4
PythonProgramming

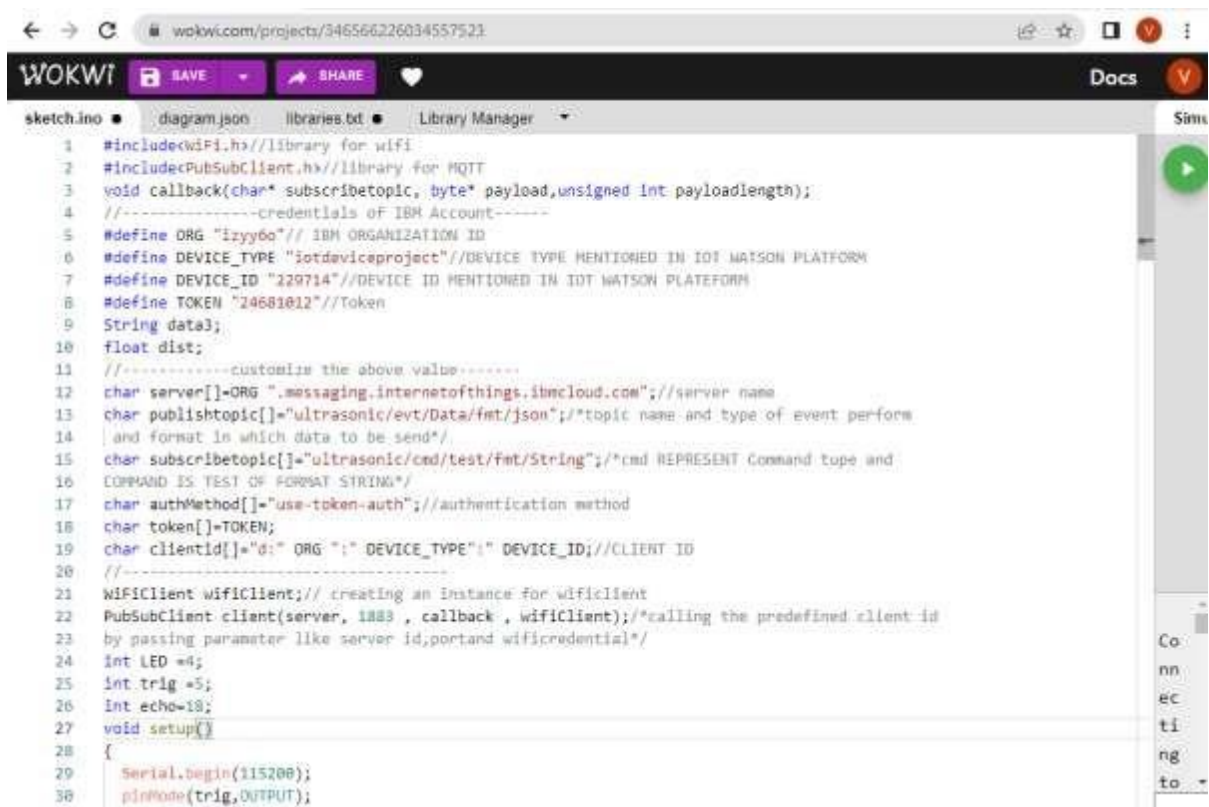| AssignmentDate	02 November 2022
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MaximumMarks	2 Marks

Question-1:

Writecode andconnectionsinwokwiforultrasonicsensor.
Whenever distance is less than 100 cms send "alert" to ibm cloud and display in device recentevents.
Uploaddocumentwithwokwishare link andimagesofibm cloud.

Solution:

WOKWI 🖫 SAVE ▾ ➤ SHARE ♥   Docs Ⓥ

sketch.ino ●   diagram.json   libraries.txt ●   Library Manager ▾   Simu

```
 92        }
 93        initManagedDevice();
 94        Serial.println();
 95      }
 96    }
 97    void wificonnect()//function defenition for wificonnect
 98    {
 99      Serial.println();
100      Serial.print("Connecting to ");
101      WiFi.begin("Wokwi.GUEST", "",6);//PASSING THE WIFI CREDIDENTIALS TO ESTABLISH CONNECTION
102      while (WiFi.status() !=WL_CONNECTED){
103        delay(500);
104        Serial.print(".");
105      }
106      Serial.println("");
107      Serial.println("WiFi connected");
108      Serial.println("IP address");
109      Serial.println(WiFi.localIP());
110    }
111    void initManagedDevice(){
112      if(client.subscribe(subscribetopic)){
113        Serial.println((subscribetopic));
114        Serial.println("subscribe to cmd OK");
115      }else{
116        Serial.println("subscribe to cmd failed");
117      }
118    }
119    void callback(char* subscribetopic,byte*payload,unsigned int payloadLength)
120    {
121      Serial.print("callback invoked for topic: ");
122      Serial.println(subscribetopic);
```

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```
123     for(int i=0; i< payloadLength; i++){
124       //Serial.print((char)payload[i]);
125       data3 +=(char)payload[i];
126     }
127     //Serial.println("dta: "+ data3);
128     //if(data3=="Near")
129     //{
130     //Serial.println(data3);
131     //digitalWrite(LED,HIGH);
132     //}
133     //else
134     //{
135     //Serial.println(data3);
136     //digitalWrite(LED,LOW);
137     //}
138     data3="";
139   }
```

OUTPUT:
DATAISSENTTOIBMCLOUDWHENNO OBJECTISDETECTED

Whennoobject isdetected

When object is detected in ultrasonic detector