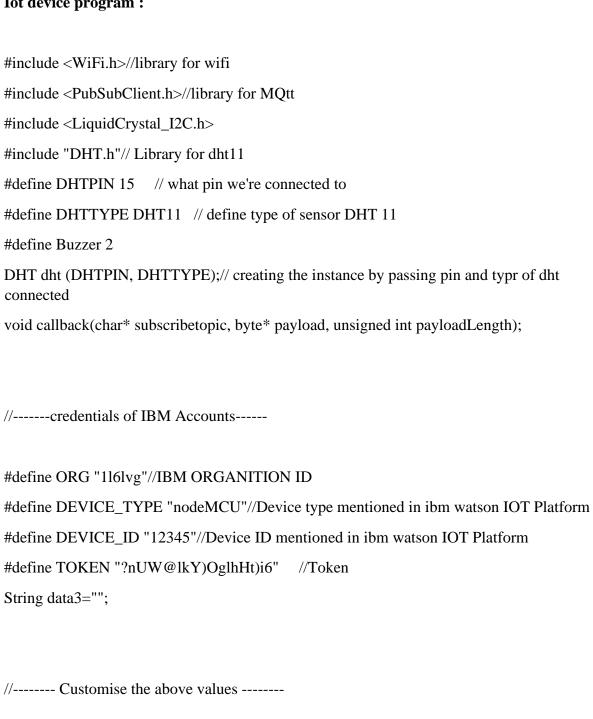
SPRINT 3

Date	11 NOV 2022
Team ID	PNT2022TMID35094
Project	Personal Assistance for Seniors who Are
	SelfReliant

Iot device program:



```
char server[] = ORG ".messaging.internetofthings.ibmcloud.com";// Server Name char
publishTopic[] = "iot-2/evt/Data/fmt/json";// topic name and type of event perform and format
in which data to be send
char subscribetopic[] = "iot-2/cmd/command/fmt/String";// cmd REPRESENT command
type
AND COMMAND IS TEST OF FORMAT STRING
char authMethod[] = "use-token-auth";// authentication method char
token[] = TOKEN;
char clientId[] = "d:" ORG ":" DEVICE_TYPE ":" DEVICE_ID;//client id
LiquidCrystal_I2C lcd(0x27,16,2);
//----
WiFiClient wifiClient; // creating the instance for wificlient
PubSubClient client(server, 1883, callback ,wifiClient); //calling the predefined client id by
passing parameter like server id, portand wificredential void setup()// configureing the ESP32
{
 Serial.begin(115200);
dht.begin();
 pinMode(Buzzer,OUTPUT);
 delay(10);
Serial.println();
wificonnect();
mqttconnect();
}
void loop()// Recursive Function
{
if (!client.loop()) {
mqttconnect();
 } }
void PublishData(float temp, float humid) {
mqttconnect();//function call for connecting to ibm
```

```
}
void mqttconnect() {  if
(!client.connected()) {
  Serial.print("Reconnecting client to ");
Serial.println(server);
  while (!!!client.connect(clientId, authMethod, token)) {
Serial.print(".");
                    delay(500);
  }
   initManagedDevice();
   Serial.println();
 } }
void wificonnect() //function defination for wificonnect
{
 Serial.println();
 Serial.print("Connecting to ");
 WiFi.begin("Wokwi-GUEST", "", 6);//passing the wifi credentials to establish the connection
while (WiFi.status() != WL_CONNECTED) {
                                                  delay(500);
  Serial.print(".");
 Serial.println("");
 Serial.println("WiFi connected");
 Serial.println("IP address: ");
 Serial.println(WiFi.localIP());
}
void initManagedDevice() {  if
(client.subscribe(subscribetopic)) {
  Serial.println((subscribetopic));
  Serial.println("subscribe to cmd OK");
 } else {
  Serial.println("subscribe to cmd FAIBuzzer");
```

```
}
}
void callback(char* subscribetopic, byte* payload, unsigned int payloadLength) {
 Serial.print("callback invoked for topic: ");
Serial.println(subscribetopic); for (int i =
0; i < payloadLength; i++) {
//Serial.print((char)payload[i]); data3 +=
(char)payload[i];
 }
 Serial.println("Medicine Name: "+ data3);
if(data3 != "")
     lcd.init();
lcd.print(data3);
digitalWrite(Buzzer,HIGH);
delay(20000);
digitalWrite(Buzzer,LOW);
 }
else
 {
digitalWrite(Buzzer,LOW);
 }
data3="";
}
```