**VELAMMAL ENGINEERING COLLEGE**

**ELECTRONICS AND COMMUNICATION ENGINEERING**

**SMART FARMERS - IOT ENABLED FARMING**

**APPLICATION**

**ASSIGNMENT – 4**

**BY:**

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# Question:

**WRITE CODE AND CONNECTIONS IN WOKWI FOR ULTRASONIC. WHENEVER DISTANCE IS LESS THAN 100 CMS SEND “ALERT” TO IBM CLOUD AND DISPLAY IN DEVICE RECENT EVENTS.**

**CODE:**

#include<WiFi.h>//libraryforwifi#include<P ubSubClient.h>//libraryforMQtt

#defineECHO\_GPIO12 #defineTRIGGER\_GPIO13

#defineMAX\_DISTANCE\_CM100//Maximumof5meters#include"Ultra sonic.h"

Ultrasonicultrasonic(13,12);int distance;

voidcallback(char\*subscribetopic,byte\*payload,unsignedintpayloadLength);

//-------credentialsofIBMAccounts------

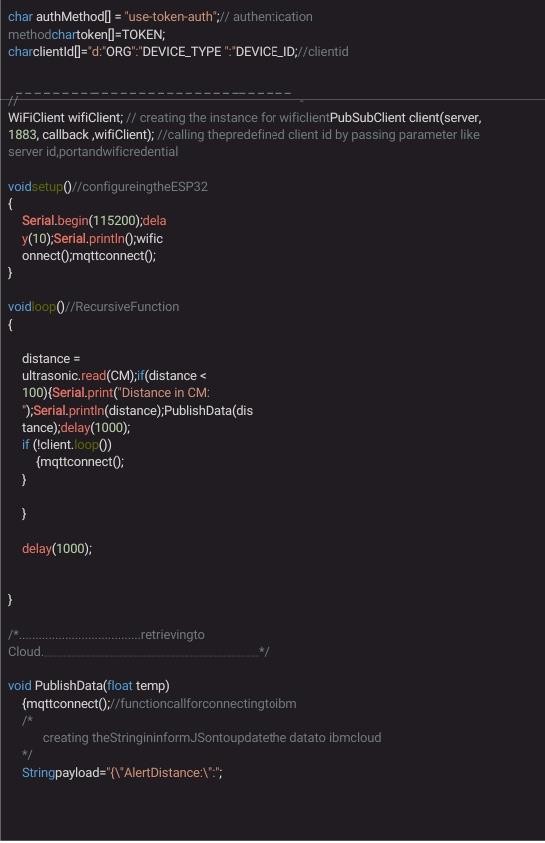
#defineORG"dv1snq"//IBMORGANITIONID #defineDEVICE\_TYPE"ESP32"//DevicetypementionedinibmwatsonIOTPlatform#define DEVICE\_ID "12345"//Device ID mentioned in ibm watson IOT Platform#defineTOKEN"45682367915"//Token

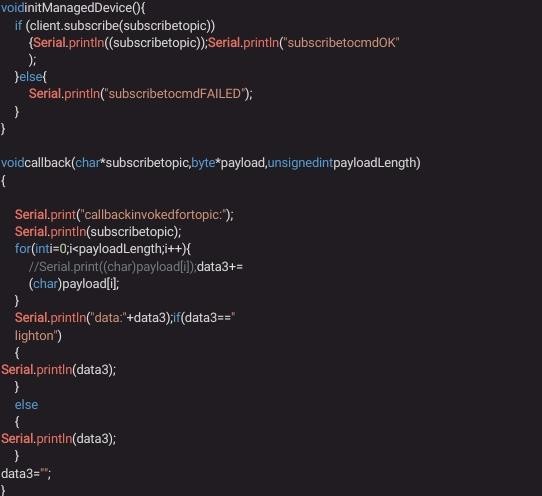
Stringdata 3;floath,t

;

//--------Customisetheabovevalues--------

char server[] = ORG ".messaging.internetofthings.ibmcloud.com";// Server Namechar publishTopic[] = "iot-2/evt/Data/fmt/json";// topic name and type ofeventperform andformatinwhich datato besend





**OUTPUT**

