Assignment-4

AssignmentDate	25October2022
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ProjectName	Project-SmartFarmer-IoTEnabledSmart FarmingApplication
MaximumMarks	2 Marks

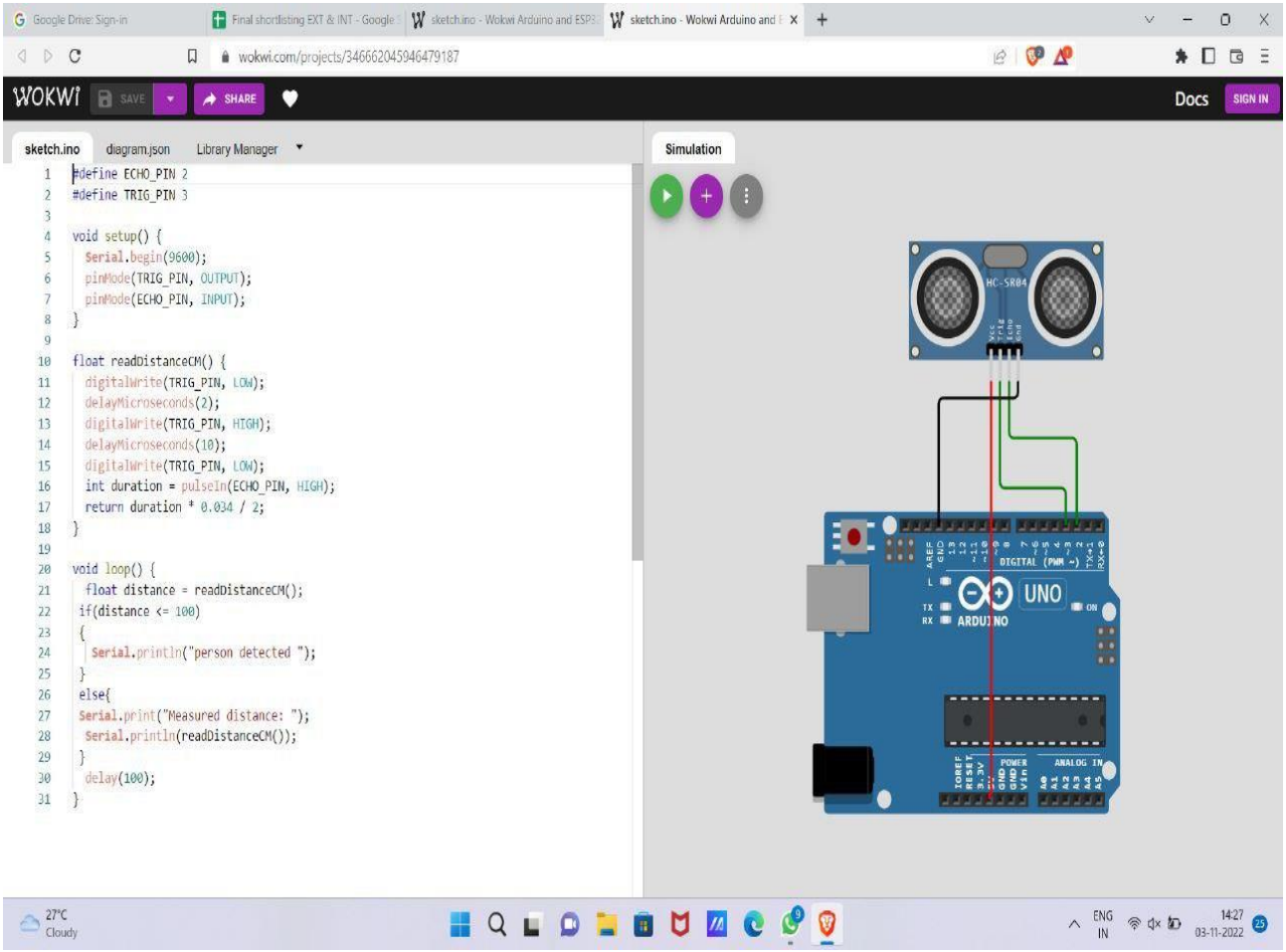
Question-1:

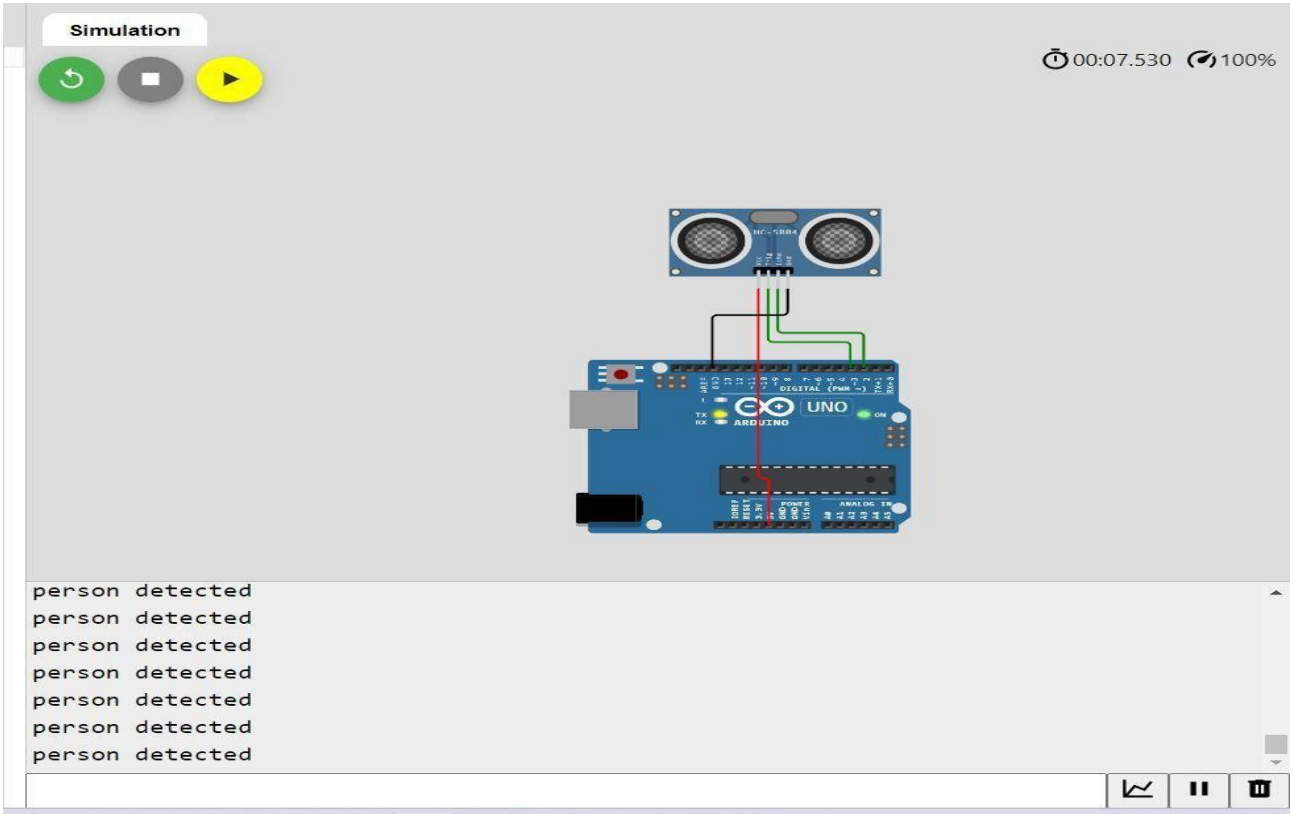
Write code and connections in wokwi for ultrasonic.Whenever distance is less than 100cms send "alert"to ibm cloud and display in device recent events.

Solution:

```
#defineECHO_PIN2

#defineTRIG_PIN3

#define organization =

"mmbh4c"#define deviceType =

"Ultrasonic"#define deviceId =

"pga460_sensor"#define authMethod =

"use-token-auth"#define

authToken="123456789"

void setup()

 {Serial.begin(9600);pinMode(

 TRIG_PIN,

 OUTPUT);pinMode(ECHO_PIN

 ,INPUT);

}


float readDistanceCM()

 {digitalWrite(TRIG_PIN,

 LOW);delayMicroseconds(2);

 digitalWrite(TRIG_PIN,

 HIGH);delayMicroseconds(10)

 ;digitalWrite(TRIG_PIN,LOW);

 int duration = pulseIn(ECHO_PIN,

 HIGH);returnduration*0.034/2;
```

```
}

voidloop() {
 float distance =
 readDistanceCM();if(distance<=100
 )
 {
  Serial.println("persondetected");
 }
 else{
 Serial.print("Measured distance:
  ");Serial.println(readDistanceCM())
  ;
 }
  delay(1000);
}
```





WokwiLink : https://wokwi.com/projects/346661436431270483

IBMCloud

DeviceRecentEvents