**ASSIGNMENT 1**

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| --- | --- |
| Date | 19 September 2022 |
| Team ID | PNT2022TMID14561 |
| Name | JERRISH LEONARD D |
| Project Name | Project – Smart Farmer-IoT Enabled Smart Farming Application |
| Maximum Marks | 2 Marks |

**PROGRAM**

|  |
| --- |
|  |
|  | const int echoPin=2, triggerPin=3, red=4, green=5, blue=6;  const int buzz = 7; |
|  | int pulseValue; |
|  | float distance; |
|  |  |
|  | void setup( ) { |
|  | pinMode(echoPin, INPUT); |
|  | pinMode(triggerPin, OUTPUT); |
|  | pinMode(red, OUTPUT); |
|  | pinMode(green, OUTPUT); |
|  | pinMode(blue, OUTPUT); |
|  | pinMode(buzz, OUTPUT); |
|  | Serial.begin(9600); |
|  | } |
|  |  |
|  | void loop( ) |
|  | { |
|  |  |
|  | digitalWrite(triggerPin, LOW); |
|  | delayMicroseconds(5); |
|  | digitalWrite(triggerPin, HIGH); |
|  | delayMicroseconds(10); |
|  | pulseValue=pulseIn(echoPin, HIGH); |
|  | distance=(pulseValue\*0.0001657\*39.37); |
|  |  |
|  |  |
|  |  |
|  | if (distance<=5) |
|  | { |
|  | digitalWrite(red, HIGH); |
|  | digitalWrite(green, LOW); |
|  | digitalWrite(blue, LOW); |
|  | tone(buzz, 500); |
|  | } |
|  |  |
|  | else if (distance<=10) |
|  | { |
|  | digitalWrite(green, HIGH); |
|  | digitalWrite(red, LOW); |
|  | digitalWrite(blue, LOW); |
|  | tone(buzz, 1000); |
|  | } |
|  |  |
|  | else |
|  | { |
|  | digitalWrite(blue, HIGH); |
|  | digitalWrite(red, LOW); |
|  | digitalWrite(green, LOW); |
|  | tone(buzz, 1500); |
|  | } |
|  |  |
|  | Serial.print(distance); |
|  | Serial.println(" inch/es"); |
|  | delay(500); |
|  | } |

