**Pseudo Code:**

Line 1-int trigger=2, echo=3;float distance; long duration;

Line 2-void setup()

Declaring setup() function

Line 3-{

Opening the function.

Line 4-pinMode(trigger, OUTPUT);

Line 5-pinMode(echo, INPUT);

Using the pinMode() function to declare trigger as output and echo as input

Line 6-pinMode(12, OUTPUT);

Using the pinMode() function 12 is connected to output.

Line 7-Serial.begin(9600);

Switching ON the serial monitor.

Line 8-}

Closing the function.

Line 9-void loop()

Declaring the loop function.

Line 10-{

Opening the function.

Line 11-digitalWrite(trigger, LOW);

Digitally assigning LOW value to the trigger variable.

Line 12-delayMicroseconds(2);

Delaying the above command by 2 microseconds.

Line 13-digitalWrite(trigger, HIGH);

Digitally assigning HIGH value to the trigger variable.

Line 14-delayMicroseconds(10);

Delaying the above command by 10 microseconds.

Line 15-digitalWrite(trigger, LOW);

Digitally assigning LOW value to the trigger variable.

Line 16-duration = pulseIn(echo, HIGH);

Calculation of pulse width of echo signal only when the digital value is HIGH which inturn assigned to duration value.

Line 17-distance= (duration\*0.034)/2;

Calculation of above formulae between the person to person

Line 18-Serial.println("Distance: ");

Printing the distance

Line 19-Serial.println(distance);

Printing the distance

Line 20- if(distance<=100)

Declaring the if statement if the distance is less than 100

Line 21-{

Opening the loop

Line 22-digitalWrite(12,HIGH);

Digitally assigning HIGH to pin 12

Line 23-}

Closing the loop

Line 24-else

Declaring the else statement

Line 25-{

Opening the loop

Line 26-digitalWrite(12,LOW);

Digitally assigning LOW to pin 12

Line 27- }

Closing the loop

Line 28-}

Closing the loop

**Algorithm**

step 1- start

step 2-declare global variables echo and trigger as int distance as float and duration as long data step 3-open setup function

step 4-define pin numbers and serial monitor

step 5-close the setup function

step 6-open the loop

step 7-give value for digital pin trigger is low

step 8-delay it for 2 microseconds

step 9-give vale for digital pin trigger as high

step 10-delay it for 10 microseconds

step 11-distance is equal to duration multiplied with0.034 and whole divided by 2

step 12-print the distance in serial monitor using serialprintln

step 13-if distance is less than 100

step14- yes the buzzer starts ringing

step 15-else

step 16-no the buzzer does not rings

step 17- end