```
// defines pins numbers
const int trigPin = 9;
const int echoPin = 10;
const int buzzer = 13;

                    //   title - ultrasonic sensor project with buzzer and Arduino
// defines variables
long duration;
int distance;
int safetyDistance;



void setup() {
pinMode(trigPin, OUTPUT); // Sets the trigPin as an Output
pinMode(echoPin, INPUT); // Sets the echoPin as an Input
pinMode(buzzer, OUTPUT);
Serial.begin(9600); // Starts the serial communication
}



void loop() {
// Clears the trigPin
digitalWrite(trigPin, LOW);
delayMicroseconds(2);

// Sets the trigPin on HIGH state for 10 micro seconds
digitalWrite(trigPin, HIGH);
delayMicroseconds(10);
digitalWrite(trigPin, LOW);

// Reads the echoPin, returns the sound wave travel time in microseconds
```

```
duration = pulseIn(echoPin, HIGH);


// Calculating the distance
distance= duration*0.034/2;


safetyDistance = distance;
if (safetyDistance <= 10)   // You can change safe distance from here changing value Ex. 20 , 40 , 60 , 80 , 100, all in cm
{
  digitalWrite(buzzer, HIGH);


}
else{
  digitalWrite(buzzer, LOW);


}


// Prints the distance on the Serial Monitor
Serial.print("Distance: ");
Serial.println(distance);
}
```