**SMART SHOES FOR VISUALLY IMPAIRED PEOPLE**

**Source code**

const int pingTrigPin = A4;

//Trigger connected to PIN

const int pingEchoPin = A5;

 //Echo connected yo PIN

 int led=13;

 //Buzzer to PIN 4

 int buz1=9;

  void setup()

   {

    Serial.begin(9600);

    pinMode(led, OUTPUT);

    pinMode(buz1, OUTPUT);

    pinMode(pingTrigPin, OUTPUT);

    pinMode(pingEchoPin, INPUT);

    }

  void loop()

    {

      long duration, cm;

      digitalWrite(pingTrigPin, LOW);

      delayMicroseconds(2);

      digitalWrite(pingTrigPin, HIGH);

      delayMicroseconds(5);

      digitalWrite(pingTrigPin, LOW);

      duration = pulseIn(pingEchoPin, HIGH);

      cm = microsecondsToCentimeters(duration);

      if(cm<=100 && cm>0)

    {

      int d= map(cm, 1, 300, 10, 1000);

      digitalWrite(led, HIGH);

      digitalWrite(buz1, HIGH);

      delay(50);

      digitalWrite(led, LOW);

      digitalWrite(buz1, LOW);

      delay(d);

    }

      Serial.print(cm);

      Serial.print(cm);

      Serial.println();

      delay(40);

    }

      long microsecondsToCentimeters(long microseconds)

      {

      return microseconds / 29 / 2;

    }

