Mini project

Code for aurdino :

#include <Ultrasonic.h>

const int trigPinUpDown = 2;

const int echoPinUpDown = 3;

const int trigPinLeftRight = 4;

const int echoPinLeftRight = 5;

Ultrasonic ultrasonicUpDown(trigPinUpDown, echoPinUpDown);

Ultrasonic ultrasonicLeftRight(trigPinLeftRight, echoPinLeftRight);

long duration;

int distanceUpDown, distanceLeftRight;

unsigned long temp = 0;

void find\_distances(void);

void setup()

{

  Serial.begin(9600);

  pinMode(trigPinUpDown, OUTPUT);

  pinMode(echoPinUpDown, INPUT);

  pinMode(trigPinLeftRight, OUTPUT);

  pinMode(echoPinLeftRight, INPUT);

  delay(1000);

}

void loop()

{

  find\_distances();

  if (distanceUpDown <= 40 && distanceUpDown >= 20)

  {

    delay(2000);

    find\_distances();

    if (distanceUpDown <= 20 && distanceUpDown >= 0)

    {

      Serial.println("down");

      Serial.println(distanceUpDown);

    }

  }

  if (distanceUpDown <= 20 && distanceUpDown >= 0)

  {

    delay(2000);

    find\_distances();

    if (distanceUpDown <= 40 && distanceUpDown >= 20)

    {

      Serial.println("up");

      // Send distance data to Python script

      Serial.println(distanceUpDown);

    }

  }

  if (distanceLeftRight <= 40 && distanceLeftRight >= 20)

  {

    delay(2000);

    find\_distances();

    if (distanceLeftRight <= 20 && distanceLeftRight >= 0)

    {

      Serial.println("left");

      Serial.println(distanceLeftRight);

    }

  }

  if (distanceLeftRight <= 20 && distanceLeftRight >= 0)

  {

    delay(2000);

    find\_distances();

    if (distanceLeftRight <= 40 && distanceLeftRight >= 20)

    {

      Serial.println("right");

      Serial.println(distanceLeftRight);

    }

  }

}

void find\_distances(void)

{

  distanceUpDown = ultrasonicUpDown.read();

  distanceLeftRight = ultrasonicLeftRight.read();

  delay(100);

}