

## CODE

```
int trigPin = 9;      // trig pin of HC-SR04

int echoPin = 10;     // Echo pin of HC-SR04

int revleft4 = 4;     //REVerse motion of Left motor
int fwdleft5 = 5;     //ForWarD motion of Left motor
int revright6 = 6;    //REVerse motion of Right motor
int fwdright7 = 7;    //ForWarD motion of Right motor

long duration, distance;

void setup() {

    delay(random(500,2000)); // delay for random time
    Serial.begin(9600);

    pinMode(revleft4, OUTPUT);    // set Motor pins as output
    pinMode(fwdleft5, OUTPUT);
    pinMode(revright6, OUTPUT);
    pinMode(fwdright7, OUTPUT);

    pinMode(trigPin, OUTPUT);    // set trig pin as output
    pinMode(echoPin, INPUT);    //set echo pin as input to capture reflected wave
s
}

void loop() {

    digitalWrite(trigPin, LOW);
    delayMicroseconds(2);
    digitalWrite(trigPin, HIGH);    // send waves for 10 us
    delayMicroseconds(10);
```

```

duration = pulseIn(echoPin, HIGH); // receive reflected waves
distance = duration / 58.2; // convert to distance
delay(10);

// If you dont get proper movements of your robot then alter the pin numbers
if (distance > 19)
{
    digitalWrite(fwdright7, HIGH); // move forward
    digitalWrite(revrigh6, LOW);
    digitalWrite(fwdleft5, HIGH);
    digitalWrite(revleft4, LOW)
;
}
if (distance < 18)
{
    digitalWrite(fwdright7, LOW); //Stop
    digitalWrite(revrigh6, LOW);
    digitalWrite(fwdleft5, LOW);
    digitalWrite(revleft4, LOW);
    delay(500);

    digitalWrite(fwdright7, LOW); //movebackward
    digitalWrite(revrigh6, HIGH);
    digitalWrite(fwdleft5, LOW);
    digitalWrite(revleft4, HIGH);
    delay(500);

    digitalWrite(fwdright7, LOW); //Stop
    digitalWrite(revrigh6, LOW);
    digitalWrite(fwdleft5, LOW);

```

```
    digitalWrite(revleft4, LOW);  
    delay(100);  
    digitalWrite(fwdright7, HIGH);  
    digitalWrite(revright6, LOW);  
    digitalWrite(revleft4, LOW);  
    digitalWrite(fwdleft5, LOW);  
    delay(500);  
}  
}
```