

```
int trigPin1=2;
int echoPin1=3;
int TouchSensor = 4;
int pot_pin1 = A0; // Initializing the Potentiometer pin
int pot_pin2 = A1;
int pot_output1 ;    // Declaring a variable for potentiometer output
int pot_output2 ;
```

```
void setup()
{
  Serial.begin (9600);
  pinMode(trigPin1, OUTPUT );
  pinMode(echoPin1, INPUT );
  pinMode(TouchSensor, INPUT);
}
```

```
void loop() {
  long duration1, distance1;
  digitalWrite(trigPin1, LOW);
  delayMicroseconds(2);
  digitalWrite(trigPin1, HIGH);
  delayMicroseconds(10);
  digitalWrite(trigPin1, LOW);
  duration1 = pulseIn(echoPin1, HIGH);
  distance1 = (duration1/2) / 29.1;

  if ((distance1 >= 0) && (distance1 <= 20)){
    Serial.print("U/");
  }
  else if ( (distance1 >= 20) && (distance1 <= 40))
  {
    Serial.print("D/");
  }

  else {
    Serial.print("N/");
  }
  delay(10);
```

```
if(digitalRead(TouchSensor)==HIGH)    //Read Touch sensor signal
```

```
{  
  
    Serial.print("F/");  
}  
else  
{  
  
    Serial.print(" /");  
}  
delay(10); // Slow down the output for easier reading  
  
    pot_output1 = analogRead (pot_pin1); // Reading from the potentiometer  
int mapped_output1 = map (pot_output1, 0, 1023, -100, 100); // Mapping the output  
  
Serial.print(mapped_output1);  
Serial.print("/");  
    delay(10);  
  
    pot_output2 = analogRead (pot_pin2); // Reading from the potentiometer  
int mapped_output2 = map (pot_output2, 0, 1023, -100, 100); // Mapping the output  
  
Serial.print(mapped_output2);  
Serial.println("");  
    delay(10);  
  
}
```