CODE :

#include <LiquidCrystal.h>

#include <stdio.h>

LiquidCrystal lcd(6, 7, 5, 4, 3, 2);

int sti=0;

String inputString = ""; // a string to hold incoming data

boolean stringComplete = false; // whether the string is complete

int m1a = 8;

int m1b = 9;

int m2a = 10;

int m2b = 11;

int buzzer = 13;

int rf1 = A0;

int rf2 = A1;

int rf3 = A2;

int rf4 = A3;

int metal = 12;

void setup()

{

Serial.begin(9600);

lcd.begin(16, 2);

lcd.print("Remote Operated");

lcd.setCursor(0,1);

lcd.print("Metal Det Robot");

delay(2000);

lcd.clear();

lcd.setCursor(0,0);lcd.print("Metal:");//6,0

}

void loop()

{

mnp:

if(digitalRead(metal) == LOW)

{

lcd.setCursor(6,0);lcd.print("Detected");

digitalWrite(buzzer, LOW);

digitalWrite(m1a, LOW);digitalWrite(m1b, LOW);

digitalWrite(m2a, LOW);digitalWrite(m2b, LOW);

goto mnp;

}

if(digitalRead(metal) == HIGH)

{

lcd.setCursor(6,0);lcd.print(" ");

digitalWrite(buzzer, HIGH);

}

if(digitalRead(rf1) == LOW)

{

digitalWrite(m1a, HIGH);digitalWrite(m1b, LOW);

digitalWrite(m2a, HIGH);digitalWrite(m2b, LOW);

}

if(digitalRead(rf2) == LOW)

{

digitalWrite(m1a, LOW);digitalWrite(m1b, HIGH);

digitalWrite(m2a, LOW);digitalWrite(m2b, HIGH);

}

if(digitalRead(rf3) == LOW)

{

digitalWrite(m1a, HIGH);digitalWrite(m1b, LOW);

digitalWrite(m2a, LOW);digitalWrite(m2b, HIGH);

}

if(digitalRead(rf4) == LOW)

{

digitalWrite(m1a, LOW);digitalWrite(m1b, HIGH);

digitalWrite(m2a, HIGH);digitalWrite(m2b, LOW);

}

if(digitalRead(rf1) == HIGH && digitalRead(rf2) == HIGH && digitalRead(rf3) == HIGH && digitalRead(rf4) == HIGH)

{

digitalWrite(m1a, LOW);digitalWrite(m1b, LOW);

digitalWrite(m2a, LOW);digitalWrite(m2b, LOW);

}

}