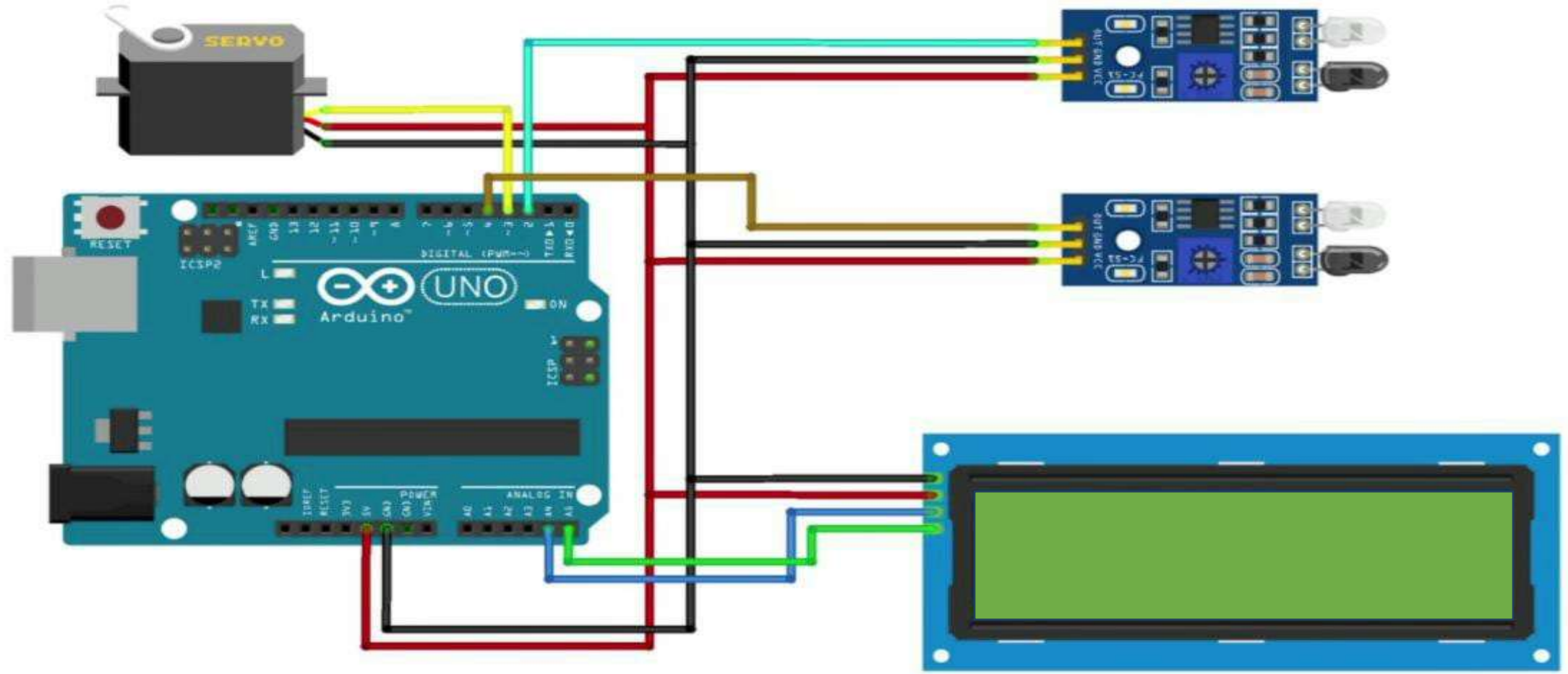
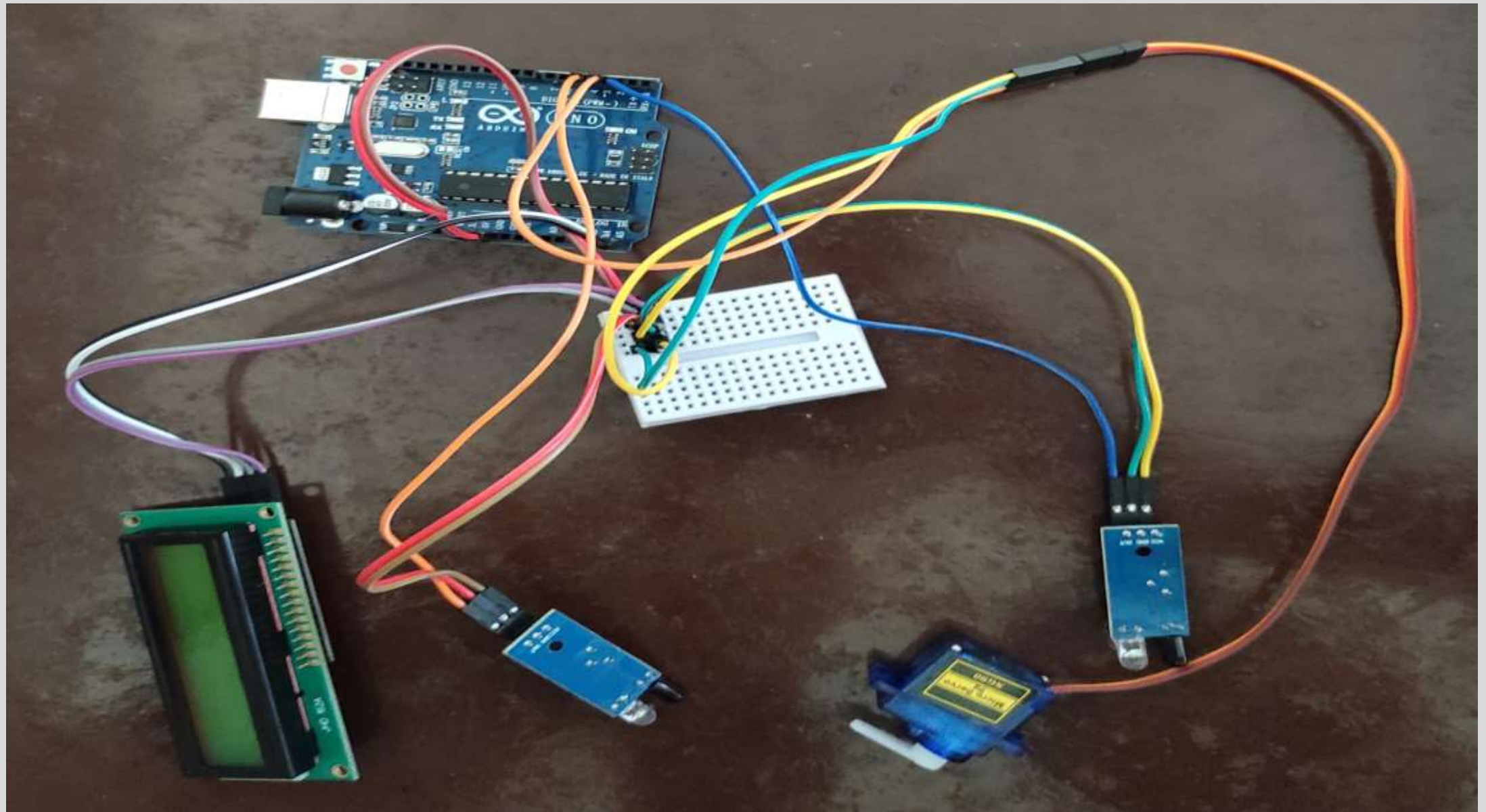


# Circuit Diagram



# PROJECT SETUP



# RESULT IN ARDUINO IDE

```
Car_Parking_System (Arduino 1.8.19 (Windows Store 1.8.37.0))
File Edit Sketch Tools Help

Car_Parking_System

#include <Wire.h>
#include <LiquidCrystal.h>
LiquidCrystal lcd(8,16,2); //Change the I2C address
#include <Servo.h>

Servo myservo;

int IRL = 2;
int IRR = 4;

int Slot = 4; //Enter Total number of parking slots

int flag1 = 0;
int flag2 = 0;

void setup() {
  lcd.begin(2,16);
  lcd.backlight();
  pinMode(IRL, INPUT);
  pinMode(IRR, INPUT);

  myservo.attach(3);
  myservo.write(180);

  lcd.setCursor(0,0);
  lcd.print("  WELCOME  ");
  lcd.setCursor(0,1);
  lcd.print("  PARKING SYSTEM ");
  delay(2000);
  lcd.clear();
}

void loop(){

  Monitoring

Sketch uses 3150 bytes (15%) of program storage space. Maximum is 32256 bytes.
Global variables use 365 bytes (17%) of dynamic memory, leaving 1633 bytes for local variables. Maximum is 2048 bytes.
```

```
Car_Parking_System (Arduino 1.8.19 (Windows Store 1.8.37.0))
File Edit Sketch Tools Help

Car_Parking_System
delay(2000);
lcd.clear();

}

void loop(){

  if(digitalRead(IRL) == LOW && flag1==0){
    if(Slot>0){flag1=1;
    if(flag2==0){myservo.write(0); Slot = Slot-1;}
    }else{
      lcd.setCursor(0,0);
      lcd.print("  WELCOME  ");
      lcd.setCursor(0,1);
      lcd.print("  PARKING Full ");
      delay(3000);
      lcd.clear();
    }
  }

  if(digitalRead(IRR) == LOW && flag2==0){flag2=1;
  if(flag1==0){myservo.write(0); Slot = Slot-1;}
  }

  if(flag1==1 && flag2==1){
    delay(3000);
    myservo.write(180);
    flag1=0; flag2=0;
  }

  lcd.setCursor(0,0);
  lcd.print("  WELCOME  ");
  lcd.setCursor(0,1);
  lcd.print("  Slot Left: ");
  lcd.print(Slot);
}

Monitoring

Sketch uses 3160 bytes (15%) of program storage space. Maximum is 32256 bytes.
Global variables use 365 bytes (17%) of dynamic memory, leaving 1633 bytes for local variables. Maximum is 2048 bytes.
```

# FINAL OUTPUT

