

```
#include <Wire.h>

#include <LiquidCrystal_I2C.h>

LiquidCrystal_I2C lcd(0x27,16,2);

#include <Servo.h>

Servo myservo;

int IR1 = 2;

int IR2 = 3;

int Slot = 4;

int flag1 = 0;

int flag2 = 0;

void setup() {

    Serial.begin(9600);

    lcd.init();

    lcd.backlight();


    pinMode(IR1, INPUT);

    pinMode(IR2, INPUT);


    myservo.attach(4);

    myservo.write(100);

    lcd.setCursor (0,0);

    lcd.print("  ARDUINO  ");

    lcd.setCursor (0,1);
```

```
lcd.print(" PARKING SYSTEM ");

delay (2000);

lcd.clear();

}

void loop(){

if(digitalRead (IR1) == LOW && flag1==0){

if(Slot>0){flag1=1;

if(flag2==0){myservo.write(0); Slot = Slot-1;}

}else{

lcd.setCursor (0,0);

lcd.print("  SORRY :(  ");

lcd.setCursor (0,1);

lcd.print(" Parking Full ");

delay (3000);

lcd.clear();

}

}

if(digitalRead (IR2) == LOW && flag2==0){flag2=1;

if(flag1==0){myservo.write(0); Slot = Slot+1;}

}

if(flag1==1 && flag2==1){

delay (1000);

myservo.write(100);

flag1=0, flag2=0;
```

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