# PRACTICAL NO.5

## Source Code –

```
#include <Servo.h>
#include<LiquidCrystal.h>
LiquidCrystal lcd(12,11,5,4,3,2);
Servo myservo;

#define ServoM 7                  //Connected to the servo motor.
#define Exit 9                    //Pin connected to the EXIT sensor.
#define In 8                      //Pin connected to the IN sensor.
#define Pwr 6                     //Extra power pin for sensors(Don't connect servo's power to this!)
#define Gnd 10                    //Extra ground pin for sensors(Don't connect servo's power to this!)
#define BarLow 90                 //Low position of the barrier.
#define BarUp 177                 //Up position of the barrier.
#define CAPACITY 24               //Capacity of the parking lot.

void setup(){
myservo.attach(ServoM);
lcd.begin(16,2);
lcd.print('BatStateU Parking");
pinMode(Gnd, OUTPUT);
pinMode(Pwr, OUTPUT);
pinMode(Exit, INPUT);
pinMode(In, INPUT);
digitalWrite(Gnd, LOW);
digitalWrite(Pwr, HIGH);
myservo.write(BarLow);
delay(1000);
}
```

```
int Available= 24;
void loop(){

if (Available == 1){
lcd.clear();
lcd.setCursor(1,0);
lcd.print(“Space left for”);
lcd.setCursor(0,1);
lcd.print(“ “);
lcd.print(“ “);
lcd.print(“ “);
lcd.print(“ “);
lcd.print(“ “);
lcd.print(Available);
lcd.print(“car”);
delay(1000);
}else{
if (Available &gt;= 1){
lcd.clear();
lcd.setCursor(1,0);
lcd.print(“Space left “);
lcd.setCursor(0,1);
lcd.print(“ “);
lcd.print(“ “);
lcd.print(“ “);
lcd.print(“ “);
lcd.print(“ “);
lcd.print(Available);
lcd.print(“cars”);
}else{
lcd.clear();
lcd.setCursor(1,0);
```

```
lcd.print(“ Sorry”);
lcd.setCursor(0,1);
lcd.print(&amp;quot; No Place left!&amp;quot;);
delay(1000);
}
}
if(digitalRead(In))
{
if(Available != 0){
Available--;
myservo.write(BarUp);
delay(3000);
myservo.write(BarLow);
}
}
if(digitalRead(Exit))
{
if(Available != CAPACITY){
Available++;
myservo.write(BarUp);
delay(3000);
myservo.write(BarLow);
}
}
delay(80);
}
```

**Circuit Diagram –**