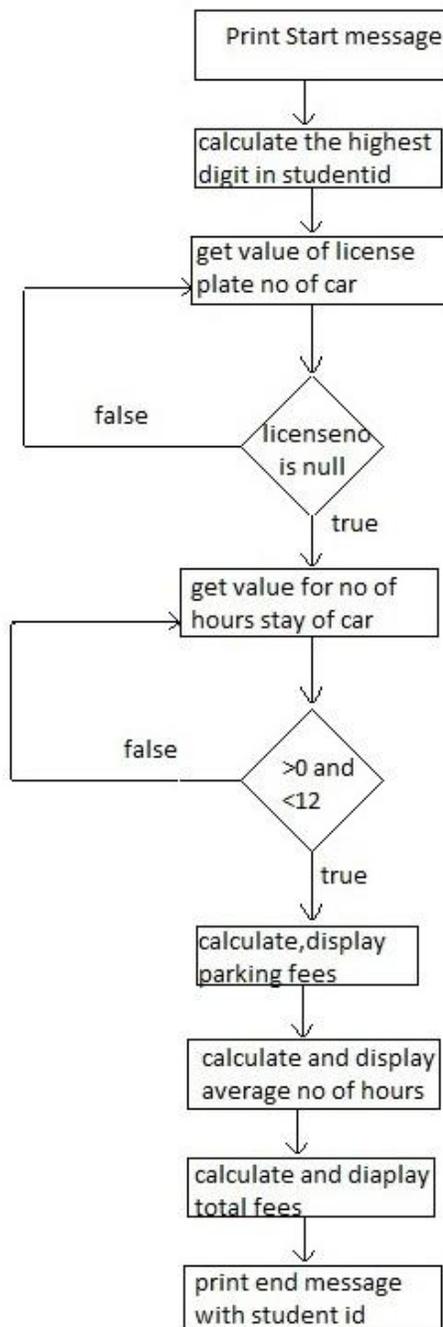


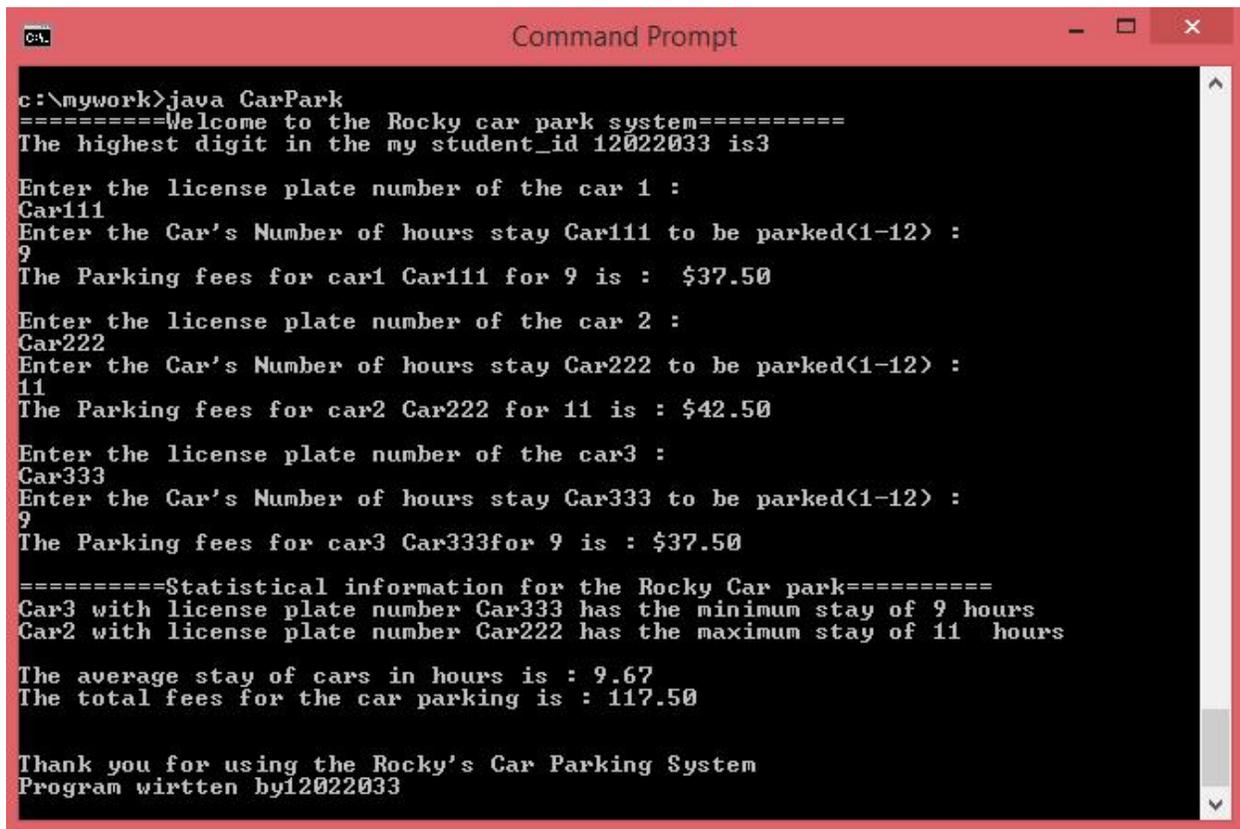
Rocky's Car Parking System

Flow chart for Car Parking System:



Screen Shots of Testing:

Given all correct inputs



```
c:\mywork>java CarPark
=====Welcome to the Rocky car park system=====
The highest digit in the my student_id 12022033 is 3

Enter the license plate number of the car 1 :
Car111
Enter the Car's Number of hours stay Car111 to be parked(1-12) :
9
The Parking fees for car1 Car111 for 9 is : $37.50

Enter the license plate number of the car 2 :
Car222
Enter the Car's Number of hours stay Car222 to be parked(1-12) :
11
The Parking fees for car2 Car222 for 11 is : $42.50

Enter the license plate number of the car3 :
Car333
Enter the Car's Number of hours stay Car333 to be parked(1-12) :
9
The Parking fees for car3 Car333for 9 is : $37.50

=====Statistical information for the Rocky Car park=====
Car3 with license plate number Car333 has the minimum stay of 9 hours
Car2 with license plate number Car222 has the maximum stay of 11 hours

The average stay of cars in hours is : 9.67
The total fees for the car parking is : 117.50

Thank you for using the Rocky's Car Parking System
Program wirtten by12022033
```

Prompting the correct inputs of license plate number and Number of hours stay for Car1:

```
Command Prompt
c:\mywork>java CarPark
=====Welcome to the Rocky car park system=====
The highest digit in the my student_id 12022033 is3

Enter the license plate number of the car 1 :
WARNING : Car's License plate number cannot be null
Enter the license plate number of the car1 :
Car111
Enter the Car's Number of hours stay Car111 to be parked(1-12) :
0
WARNING : Number of hours stay for a car1 should be between 1 and 12
Enter the Car's Number of hours stay Car111 to be parked(1-12) :
-53
WARNING : Number of hours stay for a car1 should be between 1 and 12
Enter the Car's Number of hours stay Car111 to be parked(1-12) :
34
WARNING : Number of hours stay for a car1 should be between 1 and 12
Enter the Car's Number of hours stay Car111 to be parked(1-12) :
2
The Parking fees for car1 Car111 for 2 is : $12.00

Enter the license plate number of the car 2 :
WARNING : Car's License plate number cannot be null
Enter the license plate number of the car2 :
Car222
Enter the Car's Number of hours stay Car222 to be parked(1-12) :
3
The Parking fees for car2 Car222 for 3 is : $16.50

Enter the license plate number of the car3 :
WARNING : Car's License plate number cannot be null
Enter the license plate number of the car3 :
Car333
Enter the Car's Number of hours stay Car333 to be parked(1-12) :
4
The Parking fees for car3 Car333for 4 is : $21.00

=====Statistical information for the Rocky Car park=====
Car1 with license plate number Car111 has the minimum stay of 2 hours
Car3 with license plate number Car333 has the maximum stay of 4 hours

The average stay of cars in hours is : 3.00
The total fees for the car parking is : 49.50

Thank you for using the Rocky's Car Parking System
Program wirtten by12022033
```

Prompting the correct inputs of license plate number and Number of hours stay for Car2:

```
Command Prompt

c:\mywork>java CarPark
=====Welcome to the Rocky car park system=====
The highest digit in the my student_id 12022033 is 3

Enter the license plate number of the car 1 :
Car111
Enter the Car's Number of hours stay Car111 to be parked(1-12) :
3
The Parking fees for car1 Car111 for 3 is : $16.50

Enter the license plate number of the car 2 :
WARNING : Car's License plate number cannot be null
Enter the license plate number of the car2 :
Car222
Enter the Car's Number of hours stay Car222 to be parked(1-12) :
0
Number of hours stay for a car2 should be between 1 and 12
Enter the Car's Number of hours stay Car222 to be parked(1-12) :
56
Number of hours stay for a car2 should be between 1 and 12
Enter the Car's Number of hours stay Car222 to be parked(1-12) :
-43
Number of hours stay for a car2 should be between 1 and 12
Enter the Car's Number of hours stay Car222 to be parked(1-12) :
3
The Parking fees for car2 Car222 for 3 is : $16.50

Enter the license plate number of the car3 :
WARNING : Car's License plate number cannot be null
Enter the license plate number of the car3 :
Car333
Enter the Car's Number of hours stay Car333 to be parked(1-12) :
4
The Parking fees for car3 Car333for 4 is : $21.00

=====Statistical information for the Rocky Car park=====
Car2 with license plate number Car222 has the minimum stay of 3 hours
Car3 with license plate number Car333 has the maximum stay of 4 hours

The average stay of cars in hours is : 3.33
The total fees for the car parking is : 54.00

Thank you for using the Rocky's Car Parking System
Program wirtnen by12022033
```

Prompting the correct inputs of license plate number and Number of hours stay for Car3:

```
Command Prompt
c:\mywork>java CarPark
=====Welcome to the Rocky car park system=====
The highest digit in the my student_id 12022033 is3

Enter the license plate number of the car 1 :
CAR111
Enter the Car's Number of hours stay CAR111 to be parked(1-12) :
2
The Parking fees for car1 CAR111 for 2 is : $12.00

Enter the license plate number of the car 2 :
Car22
Enter the Car's Number of hours stay Car22 to be parked(1-12) :
4
The Parking fees for car2 Car22 for 4 is : $21.00

Enter the license plate number of the car3 :
WARNING : Car's License plate number cannot be null
Enter the license plate number of the car3 :
Car333
Enter the Car's Number of hours stay Car333 to be parked(1-12) :
0
WARNING : Number of hours stay for a car3 should be between 1 and 12
Enter the Car's Number of hours stay Car333 to be parked(1-12) :
-25
WARNING : Number of hours stay for a car3 should be between 1 and 12
Enter the Car's Number of hours stay Car333 to be parked(1-12) :
87
WARNING : Number of hours stay for a car3 should be between 1 and 12
Enter the Car's Number of hours stay Car333 to be parked(1-12) :
10
The Parking fees for car3 Car333for 10 is : $40.00

=====Statistical information for the Rocky Car park=====
Car1 with license plate number CAR111 has the minimum stay of 2 hours
Car3 with license plate number Car333 has the maximum stay of 10 hours

The average stay of cars in hours is : 5.33
The total fees for the car parking is : 73.00

Thank you for using the Rocky's Car Parking System
Program wirtten by12022033
```

Checking Maximum and minimum number of hours stay

```
CA. Command Prompt
c:\mywork>java CarPark
=====Welcome to the Rocky car park system=====
The highest digit in the my student_id 12022033 is3

Enter the license plate number of the car 1 :
Car111
Enter the Car's Number of hours stay Car111 to be parked(1-12) :
1
The Parking fees for car1 Car111 for 1 is : $7.50

Enter the license plate number of the car 2 :
Car222
Enter the Car's Number of hours stay Car222 to be parked(1-12) :
3
The Parking fees for car2 Car222 for 3 is : $16.50

Enter the license plate number of the car3 :
Car333
Enter the Car's Number of hours stay Car333 to be parked(1-12) :
10
The Parking fees for car3 Car333for 10 is : $40.00

=====Statistical information for the Rocky Car park=====
Car1 with license plate number Car111 has the minimum stay of 1 hours
Car3 with license plate number Car333 has the maximum stay of 10 hours

The average stay of cars in hours is : 4.67
The total fees for the car parking is : 64.00

Thank you for using the Rocky's Car Parking System
Program wirtten by12022033
```

Checking for maximum and minimum number of stay

```
Command Prompt
c:\mywork>java CarPark
=====Welcome to the Rocky car park system=====
The highest digit in the my student_id 12022033 is3

Enter the license plate number of the car 1 :
Car111
Enter the Car's Number of hours stay Car111 to be parked(1-12) :
10
The Parking fees for car1 Car111 for 10 is : $40.00

Enter the license plate number of the car 2 :
Car222
Enter the Car's Number of hours stay Car222 to be parked(1-12) :
7
The Parking fees for car2 Car222 for 7 is : $31.50

Enter the license plate number of the car3 :
Car333
Enter the Car's Number of hours stay Car333 to be parked(1-12) :
1
The Parking fees for car3 Car333for 1 is : $7.50

=====Statistical information for the Rocky Car park=====
Car3 with license plate number Car333 has the minimum stay of 1 hours
Car1 with license plate number Car111 has the maximum stay of 10 hours

The average stay of cars in hours is : 6.00
The total fees for the car parking is : 79.00

Thank you for using the Rocky's Car Parking System
Program wirtten by12022033
```

Checking for maximum and minimum number of stay

```
Command Prompt
c:\mywork>java CarPark
=====Welcome to the Rocky car park system=====
The highest digit in the my student_id 12022033 is3

Enter the license plate number of the car 1 :
Car111
Enter the Car's Number of hours stay Car111 to be parked(1-12) :
3
The Parking fees for car1 Car111 for 3 is : $16.50

Enter the license plate number of the car 2 :
Car222
Enter the Car's Number of hours stay Car222 to be parked(1-12) :
1
The Parking fees for car2 Car222 for 1 is : $7.50

Enter the license plate number of the car3 :
Car333
Enter the Car's Number of hours stay Car333 to be parked(1-12) :
10
The Parking fees for car3 Car333for 10 is : $40.00

=====Statistical information for the Rocky Car park=====
Car2 with license plate number Car222 has the minimum stay of 1 hours
Car3 with license plate number Car333 has the maximum stay of 10 hours

The average stay of cars in hours is : 4.67
The total fees for the car parking is : 64.00

Thank you for using the Rocky's Car Parking System
Program wirtten by12022033
```

Work around:

It took a week around to develop the coding with the help of topics covered in the first six weeks of course. All the materials has been referred and code is implemented on the course basis.

Problem encountered:

With the Decimal formatting. It has been resolved and string format is used in the code in order to display the real values with two decimal points