**Car-Service Management System - Requirement 6**

**Requirement 6:**  
  
  
Given the list of bookings, you would like to calculate the amount of revenue generated by each service engineer. For convenience sake, the customer and car references in the booking class is replaced by their respective ids alone.

a)Create a Booking Class with the following attributes:

|  |  |
| --- | --- |
| **Member Field Name** | **Type** |
| bookingId | Long |
| dateTimeOfService | Date(java.util) |
| paymentMode | String |
| customerId | Long |
| carId | Long |
| amount | Double |
| serviceEngineer | String |

B )Mark all the attributes as private. Create / Generate appropriate Getters & Setters. Add a default constructor and a parameterized constructor to take in all attributes in order Booking(Long bookingId, Date dateTimeOfService, String paymentMode, Long customerId, Long carId, Double amount, String serviceEngineer).

c)The input format  consists of all booking details seperated by comma in the below order,  
(bookingId,dateTimeOfService,paymentMode,customerId,carId,amount,serviceEngineer)

d) Create static method **organizeBookings** in **Booking** class which takes **List<Booking>** as input parameter and return a **Map<String,List<Booking>>.**The key of the map is "serviceEngineer" and the value is the list of all the bookings handled by the service engineer. This method should loop thorough the list of bookings and create multiple smaller lists of booking for each service engineer (value of the hashmap). Add each of the smaller lists to the map and return the same.

e) Create a static method **findBestServiceEngineer** in **Booking** class which takes **Map<String,List<Booking>>** as parameters and **List<String>** as return type.   
This method takes up the organisedbooking for each service engineer and computes the total amount generated by each engineer. The list is sorted based on the maximum amount generated by engineer. The list of the service engineer names are returned from the method.  
  
  
In output print the serviceEngineer name and number bookings for the service engineer ssorted based on the maximum amount generated by engineer. The output format should be System.out.format("%-15s %s\n","Name","No of Booking");

**Sample Input and Output:**  
Enter a booking detail:  
**1,06-01-2015,CC,11,1001,100,John**  
Do you want to add another booking detail:  
**yes**  
Enter a booking detail:  
**2,01-06-2017,CC,12,1002,200,Peter**  
Do you want to add another booking detail:  
**yes**  
Enter a booking detail:  
**3,28-02-2015,DC,13,1003,150,Peter**  
Do you want to add another booking detail:  
**yes**  
Enter a booking detail:  
**4,24-06-2015,CC,14,1004,250,John**  
Do you want to add another booking detail:  
**yes**  
Enter a booking detail:  
**5,14-06-2016,DC,15,1005,75,John**  
Do you want to add another booking detail:  
**yes**  
Enter a booking detail:  
**6,12-05-2017,DC,16,1006,125,Peter**  
Do you want to add another booking detail:  
**yes**  
Enter a booking detail:  
**7,24-12-2011,CC,17,1007,185,Peter**  
Do you want to add another booking detail:  
**no**  
Name            No of Booking  
Peter              4  
John              3