In this requirement, build a feature in which user can book tables. If the table is not available suggest alternate tables in ascending order of table number.  
  
a) Create a Booking Class with the following private attributes:

|  |  |
| --- | --- |
| **Member Field Name** | **Type** |
| id | Long |
| customerName | String |
| table | Table |
| membersPresent | Integer |
| billamount | Double |
| bookingTime | java.util.Date |

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 the given order:**Booking(Long id, String customerName, Table table, Integer membersPresent, Double billamount, Date bookingTime)**  
  
b) Create a Table Class with the following private attributes:

|  |  |
| --- | --- |
| **Member Field Name** | **Type** |
| id | Long |
| number | Integer |
| capacity | Integer |

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 the given order:**Table(Long id, Integer number, Integer capacity)**  
  
c) The Table class should implement the **Comparable** interface which sorts the table list based on table number.

d) Create the following static methods in the **Table** class,

|  |  |
| --- | --- |
| **Method Name** | **Description** |
| static Table createTable(String line) | This method accepts a String and returns a table object. The csv String is passed as value. Split the value, then create a table object and return it. |

e) Create the following static methods in the **Booking** class,

|  |  |
| --- | --- |
| **Method Name** | **Description** |
| static void createBooking(List<Table> tableList,List<Booking> bookingList,String line) | This method accepts a list of table, booking list, and a booking detail from the user as arguments. Check if the table is already booked or not from bookinglist. If the table is not booked create a Booking object and add it to the booking list and display "**Table successfully booked**", if it is already booked display "**Sorry the table is not available**" followed by the available table details. |

**Note:**The list of available tables and status of booking are displayed within the function.   
  
The input format of Table details are separated by comma in the below order,  
**(id, number, capacity)**  
  
The input format of Booking details are separated by comma in the below order,  
**(id, customerName, tableNumber, membersPresent, billamount, bookingTime)**   
  
When the “table” object is printed, it should display the following format  
Print format:  
**System.out.format("%-5s %-10s %s\n","ID","Number","Capacity");**  
  
**Sample INPUT & OUTPUT 1:**  
  
Enter the number of tables:  
**2  
101,10,10  
102,20,15**  
Enter the booking details:  
**10,John,10,8,1200,12-01-2018**  
Table successfully booked  
Do you want to continue(yes/no)  
**yes**  
Enter the booking details:  
**20,Peter,2,9,1300,12-01-2018**  
Sorry the table is not available  
The available tables are:  
ID    Number     Capacity  
102   20         15  
Do you want to continue(yes/no)  
**yes**  
Enter the booking details:  
**20,Peter,10,8,1300,12-01-2018**  
Sorry the table is not available  
The available tables are:  
ID    Number     Capacity  
102   20         15  
Do you want to continue(yes/no)  
**yes**  
Enter the booking details:  
**20,Peter,20,8,1300,12-01-2018**  
Table successfully booked  
Do you want to continue(yes/no)  
**no**