1. Write Spring core application and create bean of Customer as per the class diagram below:

<table>
<tr><td colspan="1">Customer</td></tr>
<tr><td>- customerId : int
- customerName: String
- monthlyIncome: double
- profession : String
- designation: String
- companyName: String</td></tr>
</table>
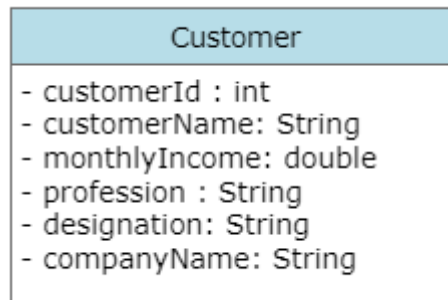
Use XML Configuration to configure Spring Container. In the above program show dependency injection

    I.   via setter methods

    II.   via constructor – Use constructor Injection with index, name, and type.

    III.   Set the same property – CustomerName with constructor as well as setter. Print the last value of the property. Which value will be available to the CustomerName property and why? Explain with help of comments.

2. Implement the Bean Scopes – Singleton and prototype and show the difference between both with the help of demo code and explain the difference with Java comments.

3. In the class Customer created in Question 1, add the below mentioned Data Members:

    List<String> phoneNumbers;

    Set<String> emailAdressSet;

    Use XML configuration to set the values of the given data members as below:

    a.   List<String> phoneNumbers – via constructor

    b.   Set<String> emailAdressSet – via setter method