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## Java and J2EE Lab

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Course Code: ISL67

Credit: 0:0:1

Contact Hours: 28

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1. Write Java program to  
Create a collection of contact lists (contact number and name)  
Accept missed calls from the user and store them in another list. If the caller details exist in the contact list , retrieve the caller details else store as “private caller”. Store them in the order .  
User can trace the missed call list and display them if required.  
Delete the number if user specifies a number to delete.  
Write main program to test the class.
2. Write a Java program using user-defined storage classes to create a book database and store it in a Collection List. Books collection should include title, author, publisher and price.  
Write method to sort the books in ascending order of price and store it in another List. Maintain the book details with respect to an unique book id.  
Prompt for an author name and list all the books with the same author’s name.  
Create a new list holding all the book details with price greater than a user specified price.  
For a given value by the user, find all the books that match either the whole or a part of the book title.  
Identify a publisher and print books from a particular publisher. Update the publisher details based on a title.
3. Create a desktop java application using swings to enable an user to enter student information such as name, usn, age, address, sgpa of 8 semesters, category.  
Perform validations on age and sgpa. Display appropriate messages in pop up boxes to indicate wrong entries.,.  
On clicking of the “compute” button, find the cgpa based on the obtained sgpa’s.  
On clicking of the “done” button, place the student details in a collection.  
A click on the “display” button should display the collection in a textarea.
4. Write a java program using Swings to validate user login information using dialog boxes.
  - a. Once validated, allow the user to enter the customer id, if the person is a new customer, else check whether the customer exists in a collection and obtain the customer id.
  - b. The customer id can be obtained given a mobile number. Allow the user to enter the item purchased by giving the item id and quantity purchased.
  - c. On clicking of a button, the item name and the total cost should appear in the corresponding GUI components.

- d. Using option dialog box, indicate the types of discount available for the customer. On clicking on the print button, print the details in information dialog box.
5. Write a program that uses Java Swing and JDBC to create a stand-alone application:
  - i. Create a table namely,
    - a. Customer (CustNo, CustName, State, Credit\_Limit, RepNo) in MySQL database. CustNo is the primary key
  - ii. Use appropriate Swing components to insert values in a form.
  - iii. Display Customer information when Credit\_Limit is above 15,000.
6. Create a Servlet to file IT returns that accepts personal information, salary information and Tax deduction details from the user. Write the information into a file. Accept the name of the person and display in on the page.
7. Create a servlet that accepts patient information in a hospital such as patient id, patient name, and age, date of admission, cause of admission, doctor diagnosed, and treatment proposed. Use HTML for front end.
  - a. Place the details into a database. Allow options to insert and view the contents in the database.
8. Create the following application with JSP and Servlet.

Create a Telephone Directory database that searches the database based on phone number or name. Inserting values to the table obtaining the data from the front end. Directory Table should include attributes: Phone\_Number, Name, Address, Company, Pin\_Code.
9. Write a Java Program that creates two threads object of Thread class. Where one thread asks the user to enter a number not less than four digits. Split the digits of the number and display in words the value of the number. Ex: 1 – One. Second thread finding the number of vowels in a word. Ex: JAVA – Vowel - A, Count – 2.