

## JAVA and J2EE Lab – SEE Lab Exam

### Subject Code : ISL68

1. Create an array list of Students (with fields such as name, USN, Dept, section, CGPA). Search for the students with CGPA  $> 8.5$ . Print the student details belonging to 'ISE' department. Print students belonging to 'C' section. Use Iterator to iterate through the list.
2. Write a Program that simulates a telephone that records missed incoming calls **in lists. Maintain the phone callers list in hashmap** . For each missed call , telephone number of origin, and name of the caller if the name is available. For unlisted numbers, set the name to "private caller". Missed calls have to be maintained in the order they arrive. User goes through the missed call list and can decide to delete the call or display the call details.

**Additional: Display all the phone numbers from the callers list whose name start from "A".**

3. Write a Java program using user-defined storage classes to create a book database and store it into a List. Each entry in the list should include title, author, publisher and price of the book. Sort the books in ascending order of price and print them. Maintain the book details with respect to a 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.

**Additional: Create a front-end using swings to accept book details**

4. Create a desktop java application using swings to enable a user to enter student information such as name, usn, age, address, sgpa of 4 semesters, category. Perform validations on age( $>18$  and  $\leq 30$ ) and sgpa(range 0 to 10). Display appropriate messages in pop up boxes to indicate wrong entries, on clicking of the "compute" button. Also find the cgpa based on the obtained sgpa. On clicking of the "done" button, place the student details in a **hashmap with unique student id as key and student information as value**. A click on the "display" button should display the collection in a textarea **in a separate frame**.
5. Write a java program to create a collection of customer details. Use swings to allow the user to enter the customer mobile number. If the person exists in the collection extract the customer id from the collection else add the customer details entered through the swing components. Once done, further allow the user to enter the item purchased by giving the item id and quantity purchased. On clicking of a button, **the item name and the total cost should appear information Dialog box. Prompt for any discount and update the total cost.**
6. **Write java program using swings to create a front end for entering employee data such as employee name, employee age, employee payscale(select from a list) , number of family members, address, gender (male, female). On the click of the button, display a message dialog box holding employer data.**  
**If the age entered is greater than 22 and less than 60 , then only the data is valid. If invalid, pop up an input dialog box to prompt the user to enter age data in the range.**

**7. Write Java program to create a front end using swings to. Accept login details such as login id , name and password. On the click of the submit button add this to a database.**

8. Write a program that uses Java Swing and JDBC to create a stand-alone application: Create two tables namely, Representative (RepNo, RepName, State, Comission, Rate) and Customer (CustNo, CustName, State, Credit\_Limit, RepNo) in MySQL database. Use appropriate Swing components to insert values in a form.  
**Display in frame those customers and representatives belonging to a particular state.**

9. Write a Java program using user-defined storage classes to create a book database and store it into a collection. Each entry in the list should include title, author, publisher and price of the book. Maintain the book details with respect to a unique book id. For a given a 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. **For collections use hashmaps.**

10. Write a program that uses Java Swing and JDBC to create a stand-alone application: Create two tables namely, Patient and Medicine in MySQL database. Use appropriate Swing components to insert values in a form for patient and medicine.  
**List the patient details taking a particular type of medicine and the type of treatment.**

11. Create a Servlet to accepts personal information, salary information and Tax deduction details from the user and write the information into **a collection**. **On clicking 'submit' button, copy the contents of the collection to the file.**

12. Create a **jsp page** 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. **Using servlet ,place the details into a database. Allow options to insert, update, and view and delete the contents in the database.**

13. Write a JSP Program to do the following to buy a T-Shirt online:

- a) A set of checkboxes to select your T-Shirt accessories such as 'belt', 'cap', 'hair-band' etc.
- b) A text area / text field to enter your T-Shirt tag-line.
- c) A Radio-button that allows the user to choose between T-Shirt with chest pocket and without. A Combo Box to choose your T-Shirt color,
- d) A Button called "Click Me"
- e) Insert the details entered into a table called 'TShirts'.
- f) An OrderNo is generated by adding '1' to the existing 'OrderNo'. If 'TShirts' table is empty, the initial value of 'OrderNo' is 100. This 'OrderNo' is also inserted into the 'TShirts' table
- g) Display all the records of the 'TShirts' table in tabular form.