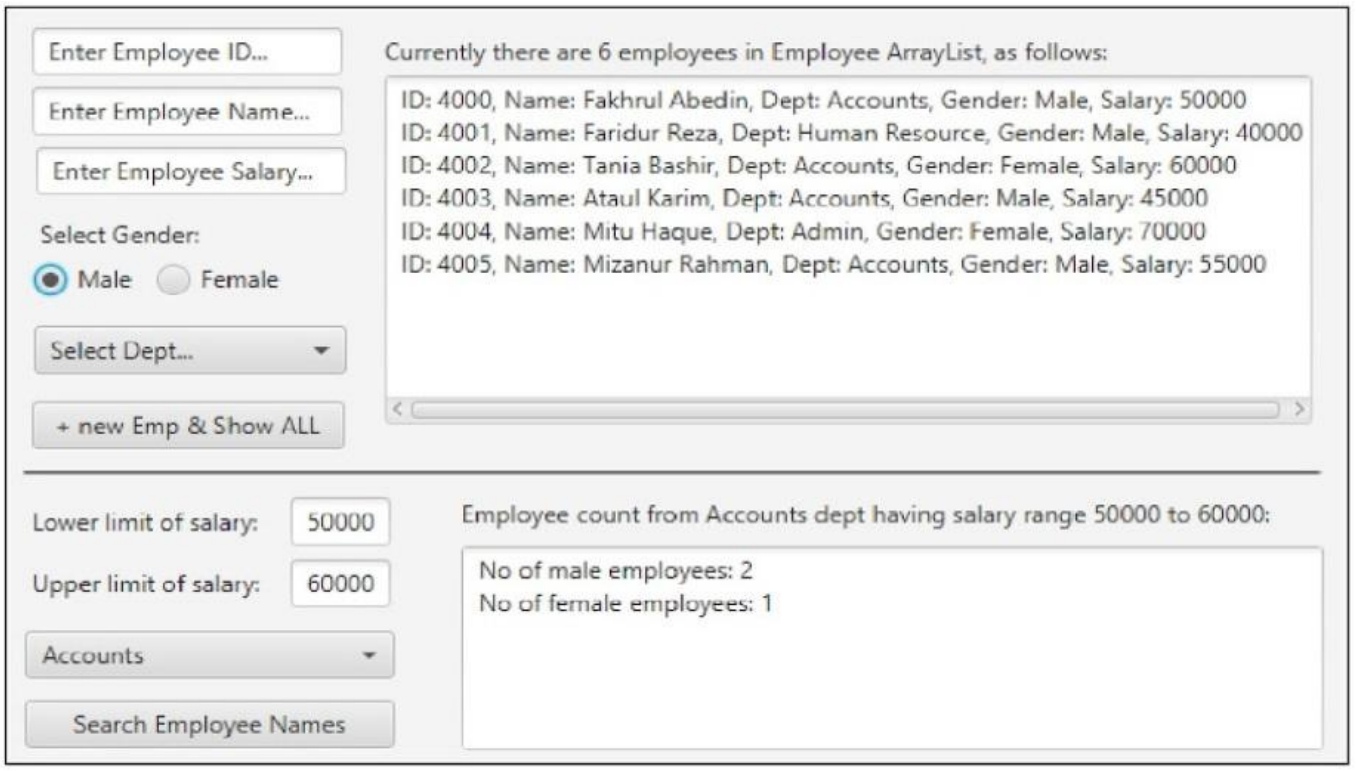
2) Consider a Java FXML application for the following:



Description	**Type**	**fxId**
Enter Employee ID	TextField	idTextField
Enter Employee Name	TextField	nameTextField
Enter Employee Salary	TextField	salaryTextField
Gender	RadioButton	maleRB & femaleRB
Combo box to select a dept	ComboBox	deptComboBox
+ new Emp & Show ALL	Button	addAndShowButton
Currently there are…	Label	empCountLabel
Text area showing all employee details	TextArea	empTextArea
Lower Limit of Salary	TextField	lowerSalTextField
Upper Limit of Salary	TextField	upperSalTextField
Combo box to search a dept	ComboBox	deptSearchComboBox
Search Employee Names	Button	searchButton
Employee count from…	label	resultLabel
Text area showing found gender counts	TextArea	resultTextArea

Note:

- Employee class fields: int id; String name, dept, gender; float salary;
- Clicking **addAndShowButton** will add a new employee instance into **empArrayList** (ArrayList of Employees), update **empCountLabel** and show all employee details from the array list into **empTextArea**, as per the given format.
- Clicking **searchButton** will display employee names from the ArrayList into **resultTextArea** whose salary is >= **lowerSalTextField** & <= **upperSalTextField** and dept is equal to **deptSearchComboBox**. It also sets the label **resultLebel** with appropriate text.

2.1) WRITE addButtonOnClick handler method for addButton **[15 marks]**
2.2) WRITE searchButtonOnClick handler method for addButton **[15 marks]**

3) **Answer the following:** **[5 marks X 3 = 15 marks]**

a) With suitable code, explain the difference between “multi-level” and “multiple” inheritance
b) Why would you have a non-abstract method in an abstract class? Give your justification with sample classes and proper explanation.
c) What is marker interface and as a class author why and how would you use a marker interface, if you want to write your class instances directly to a binary file using writeObject method?