

### Assignment 3

#### Collection Classes and File Handling

1. Each department is described by dept code (unique), dept name, location. Each employee is described by emp code (unique), emp name, basic and dept code. Maintain list of departments and list of employees such that one can:

- i) add employee (emp code unique and dept code must exist), add department (dept code unique)
- ii) display the details for a given emp code along with corresponding department details.
- iii) display details of all employees
- iv) find total basic pay for a department
- v) remove an employee (given an emp code)
- vi) modify basic of an employee
- vii) sort the employee list -- according to basic in descending order, according to dept code, according to emp code

Design and implement the classes. Do the same once considering the list as an array like collection and again as an linked list like collection.

2. There are number of accounts. Each account has account number (unique), name of the account and balance. Very frequent query is to provide the balance for an account. Other requirements are to verify the existence of an account, adding new account and displaying all accounts.

Design and implement the necessary classes.

3. Write a program that takes a filename from user and checks whether it exists or not. If it exists then check whether it is a directory or not. If it is a directory then show the list of files in it. If it is not a directory then show whether it can be read and/or written into.

4. Write a program to create a text file to store a list of names and then read the content.

5. Student class contains roll, name and score. Write a program to store the objects in a file and thereafter read all the objects.