

## Topic: Collection & Layered architecture

1. Create an Employee class with the related attributes and behaviours.  
Create one more class EmployeeDB which has the following methods.

- a. boolean addEmployee(Employee e)
- b. boolean deleteEmployee(int eCode)
- c. String showPaySlip(int eCode)
- d. Employee getEmployee(int eCode)
- e. Employee [] getAllEmployees()

Use an ArrayList which will be used to store the employees and use enumeration/iterator to process the employees. Write a Test Program to test that all functionalities are operational.

2. Create an ArrayList which will be able to store only Strings. Create a printAll method which will print all the elements using an Iterator.
3. Create an ArrayList which will be able to store only numbers like int,float,double,etc, but not any other data type.
4. Create Collection called TreeSet which is capable of storing String objects. The Collection should have the following capabilities:
  - a. Reverse the elements of the Collection
  - b. Iterate the elements of the TreeSet
  - c. Checked if a particular element exists or not
5. Create a Collection called HashMap which is capable of storing String objects. The program should have the following abilities:
  - a. Check if a particular key exists or not
  - b. Check if a particular value exists or not
  - c. Use Iterator to loop through the map key set
6. Write a program that will have a Properties class which is capable of storing some States of India and their Capital. Use an Iterator to list all the elements of the Properties.
7. Create an ArrayList of Employee (id, name, address, sal) objects and search for particular Employee object based on id number and name.

8. Write a program creates a HashMap to store name and phone number (Telephone book). When name is given, we can get back the corresponding phone number.
9. Write a program to store a group of employee names into a HashSet, retrieve the elements one by one using an Iterator
10. Write a program that allows 'Global Net Electronics' Shop manager to add 3 Laptop model names in a list. eg. 'Dell Inspiron', 'Lenovo Ideapad', 'HP Pavilion' etc.  
Ask user to enter any Laptop Model Name. Search in a above list.  
If present display "Yes, Model is Available, would you like to buy?"  
If not then display " Sorry, Model is not available ".  
If Model is not available eg 'Asus Predator ', shop keeper orders this unavailable Model, so allow him to add above new Model Name in a List.  
Display the final List.