Module: Core Java

Session 19: Basics of Collection Framework Practice

* This is practice session; you will work on Collections assignments.
* You can discuss your doubts with trainer

**Assignments:**

**Assignment 1 – Working with basic collections**

1. Write a program to print the duplicate values in an array list.
2. Write a program to add integer objects into ArrayList and print only even numbers present in the ArrayList.
3. Create a class called Employee with attributes: name, designation and salary. Add the objects of an Employee class to an Arraylist and display the employee details.
4. Insert all elements of other collection to the specified index of java ArrayList.
5. Write a program to copy all the elements from set2 to set1 so that the set1 becomes the union of set1 and set2.
6. Write a program to get a key from a value with a HashMap.

**Assignment 2 – Complete the Caselet**

**package** com.ts.types;

**import** java.util.ArrayList;

**import** java.util.HashMap;

**import** java.util.HashSet;

**import** java.util.Iterator;

**import** java.util.List;

**import** java.util.Map;

**import** java.util.Set;

**public** **class** CollectionsDemo {

/\*\*

\* **@param** args

\*/

@SuppressWarnings("unchecked")

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

String str1 = **new** String("Talent");

String str2 = **new** String("Sprint");

String str3 = **new** String("Gachibowli");

Integer i1 = **new** Integer("122");

Integer i2 = **new** Integer("127");

Integer i3 = **new** Integer("125");

//creating set object

Set set = **new** HashSet();

//adding elements to set

set.add(str1);

//write code to add the remaining string elements to set

//displaying list elements

System.*out*.println(set);

//creating list object

List list = **new** ArrayList();

//adding elements to set

list.add(str1);

//write code to add the remaining string elements to list

//displaying list elements

System.*out*.println(list);

//creating map object

Map map = **new** HashMap<String, Integer>();

//adding elements(key and value) to map

map.put(i1,str1);

//write code to add the remaining elements to map

//displaying map elements

System.*out*.println(map);

//creating itertor reference

Iterator iterates = set.iterator();

//using iterator to traverse

//use Itertor methods to traverse through the set and display

**while**( )

{

//display the set elements using Iterator methods

}

}

}