Generics

Question-1

**package** com.generics;

**import** java.util.Set;

**import** java.util.HashSet;

**public** **class** Q1\_Generics {

//private static final char[] Q1\_Generics = null;

**private** **int** id;

**private** String name;

**private** **double** salary;

**private** String department;

**private** String displaydetail;

**public** Q1\_Generics(**int** id,String name,**double** salary,String department,String displaydetail)

{

**this**.id=id;

**this**.name=name;

**this**.salary=salary;

**this**.department=department;

**this**.displaydetail=displaydetail;

}

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

Set<Q1\_Generics> employee = **new** HashSet<>();

employee.add(**new** Q1\_Generics(12345,"Pankaj",1234.567,"CSE","Junior Manager"));

employee.add(**new** Q1\_Generics(12577,"Dheeraj",34566.755,"ME","Senior Manager"));

employee.add(**new** Q1\_Generics(12483,"Suraj",74834992.993,"EE","Clerk"));

employee.add(**new** Q1\_Generics(13839,"Vipin",48823.828,"CE","HR"));

}

}

Question-2

**package** com.generics;

**import** java.util.HashMap;

**public** **class** Q2\_Generics {

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

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

// Adding elements to the Map

// using standard add() method

map.put(10,2345.44453);

map.put(20,2434.44423);

map.put(30,6324.66345);

map.put(40,2345.56443);

map.put(50,3343.43432);

map.put(67,8554.9654);

map.put(76,8536.9875);

map.put(89,29765.97654);

map.put(24,2340.9754);

map.put(90,2345.49873);

// Printing elements in object of Map

System.***out***.println(map);

}

}

Question-3

**package** com.generics;

**import** java.util.ArrayList;

**import** java.util.Arrays;

**import** java.util.Collections;

**import** java.util.List;

**public** **class** Q3\_Generics {

**public** **static** **final** <T> **void** swap (T[] a, **int** i, **int** j) {

T t = a[i];

a[i] = a[j];

a[j] = t;

}

**public** **static** **final** <T> **void** swap (List<T> l, **int** i, **int** j) {

Collections.<T>*swap*(l, i, j);

}

**private** **static** **void** test() {

String [] a = {"Hello", "Goodbye"};

*swap*(a, 0, 1);

System.***out***.println("a:"+Arrays.*toString*(a));

List<String> l = **new** ArrayList<String>(Arrays.*asList*(a));

*swap*(l, 0, 1);

System.***out***.println("l:"+l);

}

**public** **static** **void** main(String...args)

{

*test*();

}

}

Output: a:[Goodbye, Hello]

l:[Hello, Goodbye]