**ASSIGNMENT ON GENERICS:**

1. **Use a Hashset to hold employee object…**

**package** Generic\_Assignment;

**import** java.util.HashSet;

**class** Employee

{

**int** id;

String name;

**double** salary;

String deparment;

**public** Employee(**int** id, String name, **double** salary, String deparment) {

**this**.id = id;

**this**.name = name;

**this**.salary = salary;

**this**.deparment = deparment;

}

}

**public** **class** first

{

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

{

HashSet<Employee> hs = **new** HashSet<>();

Employee emp = **new** Employee(1,"Palak", 10000.98,"CSE");

hs.add(emp);

**for**(Employee E1:hs)

{

System.***out***.println(emp.id+ " " +emp.name+ " " +emp.salary+ " " +emp.deparment);

}

}

}

**Output:**

1 Palak 10000.98 CSE

1. **To hold 10 random int values and 10 random double values :**

**package** Generic\_Assignment;

**import** java.util.HashMap;

**import** java.util.Map;

**public** **class** Second {

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

{

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

System.***out***.println("Key : Value");

HM.put(1,20.7);

HM.put(8, 89.6);

HM.put(9,56.7);

HM.put(3, 56.4);

HM.put(2,90.7);

HM.put(7, 34.9);

HM.put(6,90.45);

HM.put(12, 85.34);

HM.put(23,29.75);

HM.put(67, 85.78);

**for**(Map.Entry m : HM.entrySet())

{

System.***out***.println(m.getKey()+ " " +m.getValue());

}

}

}

**Output:**

Key : Value

1 20.7

2 90.7

3 56.4

67 85.78

6 90.45

7 34.9

23 29.75

8 89.6

9 56.7

12 85.34

1. **To Exchange the position of two different element:**

**package** Generic\_Assignment;

**import** java.util.Arrays;

**public** **class** third {

**public** **static** **void** swap(Object[] a,**int** i , **int** j)

{

Object temp=a[i];

a[i]=a[j];

a[j]=temp;

}

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

{

String[] a= {"1","2","3"};

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

*swap*(a,0,2);

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

}

}

**Output:**

Before Swapping : [1, 2, 3]

After Swapping : [3, 2, 1]

1. **(a) key : String value , value : String**

**package** Generic\_Assignment;

**import** java.util.HashMap;

**import** java.util.Map;

**public** **class** Fourth {

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

HashMap<String , String > HP = **new** HashMap<>();

HP.put("1", "Palak");

HP.put("2", "Shourya");

**for**(Map.Entry m : HP.entrySet())

{

System.***out***.println(m.getKey()+ " " +m.getValue());

}

}

}

**Output:**

1 Palak

2 Shourya

**4(b): key : String value , value : date**

**package** Generic\_Assignment;

**import** java.util.Date;

**import** java.util.HashMap;

**public** **class** Fifth {

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

{

HashMap<String , Date > HP = **new** HashMap<>();

HP.put("Today's Date is : ", **new** java.util.Date());

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

}

}

**Output:**

{Today's Date is : =Mon Jan 17 15:09:44 IST 2022}