**Generic Assignments:-**

1. **import** java.util.HashSet;

**public** **class** Employee{

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

**private** String name;

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

**private** String department;

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

**this**.id = id;

**this**.name = name;

**this**.salary = salary;

**this**.department = department;

}

**public** **int** getId() {

**return** id;

}

**public** **void** setId(**int** id) {

**this**.id = id;

}

**public** String getName() {

**return** name;

}

**public** **void** setName(String name) {

**this**.name = name;

}

**public** **double** getSalary() {

**return** salary;

}

**public** **void** setSalary(**double** salarylary) {

**this**.salary = salary;

}

**public** String getDepartment() {

**return** department;

}

**public** **void** setDepartment(String department) {

**this**.department = department;

}

**public** String displayDetails(){

**return** "Employee{" +

"id=" + id +

", name='" + name + '\'' +

", salary='" + salary + '\'' +

", department='" + department + '\'' +

'}';

}

}

**class** Main{

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

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

employees.add(**new** Employee(1,"abcd",3000,"IT"));

employees.add(**new** Employee(2,"efgh",4000,"CyberSecurity"));

employees.add(**new** Employee(3,"ijjk",5000,"HR"));

employees.add(**new** Employee(4,"lmno",5000,"Business"));

employees.add(**new** Employee(5,"pqrst",9000,"Finance"));

employees.add(**new** Employee(6,"uvwx",4400,"Accounts"));

**for**(Employee e : employees){

System.***out***.println(e.displayDetails());

}

}

}

**import** java.util.HashMap;

**import** java.util.Map;

**public** **class** HashMapExample {

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

{

// initialize a HashMap for Integer and Double

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

// Add elements using put method

map.put(1,10.0 );

map.put(2, 20.0);

map.put(3, 30.0);

map.put(4, 40.0);

map.put(5, 50.0);

map.put(6, 60.0);

map.put(7, 70.0);

map.put(8, 80.0);

map.put(9, 90.0);

map.put(10, 100.0);

**for** (Map.Entry<Integer, Double> e : map.entrySet())

System.***out***.println("Key: as ID " + e.getKey()

+ " Value: as Marks " + e.getValue());

}

}

1. **import** java.util.ArrayList;

**import** java.util.Collections;

**public** **class** GenericMethod {

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

ArrayList<String> al = **new** ArrayList<String>();

al.add("Praveen");

al.add("Kumar");

al.add("Naruto");

al.add("Hinata");

al.add("Goku");

al.add("Eren");

System.***out***.println("ArrayList before Swap:");

**for**(String temp: al){

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

}

//Swapping 2nd(index 1) element with the 5th(index 4) element

Collections.*swap*(al, 1, 4);

System.***out***.println("ArrayList after swap:");

**for**(String temp: al){

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

}

}

}

1. a) **import** java.util.HashMap;

**import** java.util.Map;

**import** java.lang.String;

**public** **class** Pair {

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

{

// initialize a HashMap for STRING AS KEY and STRING AS VALUE

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

// Add elements using put method

myObj.put("Praveen","CSE");

myObj.put("KUMAR","ECE");

myObj.put("Anudeep","EEE");

myObj.put("Rani","MECH");

myObj.put("Rose","CSE");

//adding student NAMES with THEIR STREAM for 5 students in the class//

// Iterate the map using

// for-each loop

**for** (Map.Entry<String, String> e :myObj.entrySet())

System.***out***.println("Key: as NAME:--> " + e.getKey()+" /"

+ " Value: as STREAM:--> " + e.getValue());

}

}

b)

**import** java.util.\*;

**import** java.lang.String;

**public** **class** Pair {

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

{

HashMap<String, java.util.Date> myObj = **new** HashMap<>();

myObj.put("TODAY IS ", **new** java.util.Date());

// Print and display TIMINGS of MyObj//

System.***out***.println("TIME AND DATE OF MyObj : "

+ myObj);

}

}