**Collection Assignments:**

**1.**

**2.**

**import** java.sql.Date;

**import** java.util.HashSet;

**import** java.util.Iterator;

**public** **class** hello {

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

HashSet<Integer> h = **new** HashSet<Integer>();

h.add(1);

h.add(2);

h.add(3);

h.add(4);

h.add(1); // try to add duplicate element

Iterator<Integer> itr = h.iterator();

**while**(itr.hasNext()) {

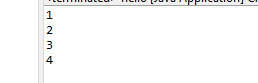
System.***out***.println(itr.next());

}

}

}

**Output:**

****

**3.**

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

**class** Employee{

**int** id;

String name ;

String department;

**double** salary;

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

{

**this**.id=id;

**this**.name=name;

**this**.department= department;

**this**.salary= salary;

}

**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** String getDepartment() {

**return** department;

}

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

**this**.department = department;

}

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

**return** salary;

}

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

**this**.salary = salary;

}

}

**class** MynameComp **implements** Comparator<Employee>

{

@Override

**public** **int** compare(Employee o1, Employee o2) {

**return** o1.getName().compareTo(o2.getName());

//return (int) (o1.getSalary() - o2.getSalary());

}

}

**public** **class** hello {

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

TreeSet<Employee> e = **new** TreeSet<Employee>(**new** MynameComp());

Employee e1 = **new** Employee(1,"Anushua Ghosh","ECE",20000.25);

Employee e2 = **new** Employee(2,"Sawan Kundu","EE",20100.57);

Employee e3 = **new** Employee(3,"Bikram Seth","ME",22000.95);

e.add(e1);

e.add(e2);

e.add(e3);

**for**(Employee s : e)

{

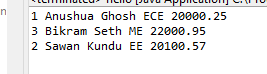
System.***out***.println(s.id+" "+s.name+" "+s.department+" "+s.salary);

}

}

}

**Output:**

****

**4.**

**package** file;

**import** java.text.DateFormat;

**import** java.time.LocalDate;

**import** java.time.format.DateTimeFormatter;

**import** java.util.Iterator;

**import** java.util.LinkedList;

**import** java.util.Locale;

**public** **class** BirthDate {

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

LinkedList<LocalDate> date = **new** LinkedList<>();

date.add(LocalDate.*of*(2000, 12, 23));

date.add(LocalDate.*of*(2001, 12, 23));

date.add(LocalDate.*of*(2016, 7, 23));

Iterator<LocalDate> itr= date.iterator();

**while**(itr.hasNext()) {

LocalDate d= itr.next();

DateTimeFormatter formatter = DateTimeFormatter.*ofPattern*("dd-MM-yyyy");

String strDate = d.format(formatter);

**if**(d.isLeapYear()) {

System.***out***.println("Your date of birth is "+ strDate

+" and it was a leap year");

}

**else**

{

System.***out***.println("Your date of birth is "+ strDate

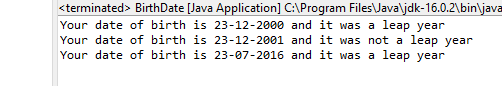
+" and it was not a leap year");

}

}

}

}

**Output:**