JAVA COLLECTION ASSIGNMENT 6

1. CONTACT CLASS

**public** **class** contact

{

String name;

Enum Gender;

String email;

**public** contact( String name, String email, Enum gender)

{

**this**.name = name;

**this**.email = email;

**this**.Gender = gender;

}

**public** String getName()

{

**return** name;

}

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

{

**this**.name = name;

}

**public** Enum getGender()

{

**return** Gender;

}

**public** **void** setGender(Enum gender)

{

Gender = gender;

}

**public** String getEmail()

{

**return** email;

}

**public** **void** setEmail(String email)

{

**this**.email = email;

}

@Override

**public** String toString()

{

**return** "contact[ name =" +name+ "email =" +email+ "gender =" +Gender+ "]";

}

}

MAIN CLASS

**import** java.util.Iterator;

**import** java.util.Set;

**import** java.util.TreeMap;

**import** java.util.Collections;

**class** contactDetails

{

**enum** gender

{

***female***, ***male***;

}

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

{

contactDetails.gender gender = **null**;

gender f = gender.female;

gender m = gender.male;

TreeMap<Long,contact> contact = **new** TreeMap<>(Collections.reverseOrder());

contact c1 = **new** contact("nikita","niki@gmail.com", gender.female);

contact c2 = **new** contact("krishna","krish@gmail.com", m);

contact.put((**long**) 999999999,c1);

contact.put((**long**) 888888888,c2);

Set set = contact.entrySet();

Iterator i = set.iterator();

**while**(i.hasNext())

{

Map.Entry<> entry = (Map.Entry<>)i.next();

System.out.println("phone no is" +entry.getKey());

System.out.println("contact details is" +entry.getValue());

System.out.println("phone no is" +entry.getKey()+ entry.getValue());

}

}

}

2)

**import** java.util.ArrayList;

**import** java.util.List;

**import** java.util.TreeSet;

**public** **class** DUPLICATE

{

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

{

List<String> movies = **new** ArrayList<>();

movies.add("ddlj");

movies.add("k3g");

movies.add("znmd");

movies.add("kkhh");

movies.add("lootera");

movies.add("101");

movies.add("kites");

movies.add("dostana");

movies.add("lagaan");

movies.add("titanic");

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

//adding duplicate item

movies.add("ddlj");

TreeSet<String> tree = **new** TreeSet<>(movies);

//duplicate item will be rejected

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

}

}

3) emploeesclass

**import** java.util.Objects;

**class** emploeesclass **implements** Comparable<emploeesclass>

{

**int** id;

String name;

String dept;

**int** salary;

**public** emploeesclass(**int** id, String name, String dept, **int** salary)

{

**super**();

**this**.id = id;

**this**.name = name;

**this**.dept = dept;

**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 getDept()

{

**return** dept;

}

**public** **void** setDept(String dept)

{

**this**.dept = dept;

}

**public** **int** getSalary()

{

**return** salary;

}

**public** **void** setSalary(**int** salary)

{

**this**.salary = salary;

}

@Override

**public** **int** hashCode() {

**return** Objects.*hash*(dept, id, name, salary);

}

@Override

**public** **boolean** equals(Object obj) {

**if** (**this** == obj)

**return** **true**;

**if** (obj == **null**)

**return** **false**;

**if** (getClass() != obj.getClass())

**return** **false**;

emploeesclass other = (emploeesclass) obj;

**return** Objects.*equals*(dept, other.dept) && id == other.id && Objects.*equals*(name, other.name)

&& salary == other.salary;

}

@Override

**public** **int** compareTo(emploeesclass o)

{

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

**return** **this**.getId() - o.getId();

}

**public** String toString()

{

**return** "Employee[id is" +id+ ", name is" +name+ ",- salary is" +salary+ ", dept is" +dept+ "]";

}

}

Sorting class

**import** java.util.TreeSet;

**import** java.util.Set;

**import** java.util.Scanner;

**public** **class** sorting

{

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

{

System.***out***.println("choose from following opt");

System.***out***.println("a.id" +'\n'+ "b.name" +'\n'+ "c.dept" +'\n'+ "d.salary");

Scanner input = **new** Scanner(System.***in***);

System.***out***.println("your choice:");

String choice = input.nextLine();

Set<emploeesclass> set = **new** TreeSet<>();

emploeesclass e1 = **new** emploeesclass( 1, "nikita", "extc", 25000);

emploeesclass e2 = **new** emploeesclass(2, "pankaj", "it", 26000);

emploeesclass e3 = **new** emploeesclass(3, "kamal", "cs", 27000);

emploeesclass e4 = **new** emploeesclass(4, "mahek", "et", 28000);

emploeesclass e5 = **new** emploeesclass(5, "mithi", "mech", 29000);

set.add(e1);

set.add(e2);

set.add(e3);

set.add(e4);

set.add(e5);

**switch**(choice)

{

**case** "a":

**for**(emploeesclass emp : set)

{

System.***out***.println("a.id is" +emp.id+ "b.name is" +emp.name+ "c.dept is" +emp.dept+ "d.salary is" +emp.salary);

}

**break**;

**case** "b":

**for**(emploeesclass emp : set)

{

System.***out***.println("b.name is" +emp.name+ "a.id is" +emp.id+ "c.dept is" +emp.dept+ "d.salary is" +emp.salary);

}

**break**;

**case** "c":

**for**(emploeesclass emp : set)

{

System.***out***.println( "c.dept is" +emp.dept+ "b.name is" +emp.name+ "a.id is" +emp.id+ "d.salary is" +emp.salary);

}

**break**;

**case** "d":

**for**(emploeesclass emp : set)

{

System.***out***.println("d.salary is" +emp.salary+ "c.dept is" +emp.dept+ "b.name is" +emp.name+ "a.id is" +emp.id);

}

**break**;

}

}

}

4)

Date class

**public** **class** Date

{

**int** date, month, year;

**public** Date(**int** date, **int** month, **int** year)

{

**super**();

**this**.date = date;

**this**.month = month;

**this**.year = year;

}

**public** **int** getDate()

{

**return** date;

}

**public** **void** setDate(**int** date)

{

**this**.date = date;

}

**public** **int** getMonth()

{

**return** month;

}

**public** **void** setMonth(**int** month)

{

**this**.month = month;

}

**public** **int** getYear()

{

**return** year;

}

**public** **void** setYear(**int** year)

{

**this**.year = year;

}

}

Bdate class

**import** java.util.LinkedList;

**import** java.util.List;

**public** **class** bday

{

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

{

List<Date> bdae = **new** LinkedList<Date>();

Date d1 = **new** Date(30,05,1999);

System.***out***.println("for the date : " +d1.getDate()+ "-" +d1.getMonth()+ "-" +d1.getYear());

**int** y = d1.getYear();

**if**(y!=0 && y%4==0)

{

System.***out***.println("this year is a leap year");

}

**else**

{

System.***out***.println("this is not a leap year");

}

}

}