LAB 7: Arrays and Collections

7.1)

package vjit;

import java.util.Arrays;

import java.util.Collections;

public class Array {

public static void main(String[] args) {

String arr[]= {"Lakme","Ponds","Nivea","F&L","Vicco"};

Arrays.sort(arr);

System.out.printf("Sorted array :\n"+Arrays.toString(arr));

}

}

out Put:-Sorted array :

[F&L, Lakme, Nivea, Ponds, Vicco]

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7.2)package vjit;

import java.util.\*;

public class ArraySort{

public static void main(String args[])

{

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

al.add("Lakme");

al.add("Ponds");

al.add("Nivea");

al.add("F&L");

al.add("Vicco");

System.out.println("Before sorting");

for(String counter:al)

{

System.out.println(counter);

}

Collections.sort(al);

System.out.println("After sorting");

for(String counter:al)

{

System.out.println(counter);

}

}

}

OUTPUT:-Before sorting

Lakme

Ponds

Nivea

F&L

Vicco

After sorting

F&L

Lakme

Nivea

Ponds

Vicco

----------------------------------------------------------------------------------------------------------

7.3)

package vjit;

import java.util.HashMap;

import java.util.Map;

public class employee {

public static void main(String[] args) {

HashMap<Integer, String>map=new HashMap<>();

map.put(10,"Rashmitha");

map.put(11,"Divya");

map.put(12,"Pavani");

map.put(13,"Sandhy");

System.out.println("Size of map is: "+map.size());

for(Map.Entry m:map.entrySet())

{

System.out.println(m.getValue());

}

String s=(String)map.remove(11);

System.out.println("remove:"+s);

}

}

OUTPUT:-

Size of map is: 4

Rashmitha

Divya

Pavani

Sandhya

remove:Divya

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Lab 8: Files IO

8.1)

package vjit;

import java.io.File;

import java.io.FileNotFoundException;

import java.util.Scanner;

public class ReadFile {

public static void main(String[] args) {

try {

File rf=new File("C:\\Users\\k nandini\\Desktop\\Module1\\nandini.txt");

Scanner myReader=new Scanner(rf);

while(myReader.hasNextLine()) {

String data=myReader.nextLine();

System.out.println(data);

StringBuffer buffer=new StringBuffer(data);

buffer=buffer.reverse();

String k=buffer.toString();

System.out.println(k);

}

myReader.close();

}

catch(FileNotFoundException e)

{

System.out.println("File not found");

}

}

}

OUTPUT:-

Capgemini

inimegpaC

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8.2)

package vjit;

import java.io.\*;

import java.util.\*;

public class Even {

public static void main(String[] args) throws IOException {

// TODO Auto-generated method stub

FileReader fr=new FileReader("C:\\Users\\alekh\\Desktop\\Module1\\alekh.txt");

BufferedReader br=new BufferedReader(fr);

String data=null;

int a=0;

while((data=br.readLine())!=null)

{

Scanner sc=new Scanner(data);

sc.useDelimiter(",");

while(sc.hasNext())

{

a=Integer.parseInt(sc.next());

if(a%2==0)

System.out.println(a);

}

}

fr.close();

br.close();

}

}

OUTPUT:-

0

2

4

6

8

10

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8.3)

package com.cg.eis.pl;

import java.io.File;

import java.io.FileOutputStream;

import java.io.ObjectOutputStream;

import java.util.Scanner;

import com.cg.eis.bean.Employee;

public class EmpUser {

static void checkSal(double sal)

{

if (sal <= 3000)

{

try

{

throw new EmployeeException();

}

catch(EmployeeException ee)

{

System.out.println(ee.getMessage());

}

}

}

public static void main(String[] args) throws Exception

{

Scanner obj = new Scanner(System.in);

EmpUser e=new EmpUser();

System.out.println("Enter the details");

System.out.println("Enter the name");

String name = obj.next();

System.out.println("Enter salary");

double sal = obj.nextDouble();

System.out.println("Enter designation");

String designation = obj.next();

Employee me = new Employee(name,sal,designation);

checkSal(sal);

me.calculate();

System.out.println("Insurance Scheme to "+me.getName()+"is:"+me.getInscheme());

System.out.println(me.toString());

FileOutputStream fos = new FileOutputStream(new File("C:\\Users\\k nandini\\Desktop\\Module1\\nandini.txt"));

ObjectOutputStream oos = new ObjectOutputStream(fos);

oos.writeObject(me);

obj.close();

}

}

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Lab 9: Introduction to Junit

1).package jdbcPack;

public class Person {

private String firstName;

private String lastName;

public Person(String fname, String lname)

{

if(fname==null&&lname==null)

{

throw new IllegalArgumentException("Both Names Cannot be NULL");

}

this.firstName=fname;

this.lastName=lname;

}

public String getFullname()

{

String first=(this.firstName!=null)?this.firstName:"?";

String last=(this.lastName!=null)?this.lastName:"?";

return first+" "+last;

}

public String getFirstName() {

return firstName;

}

public String getLastName() {

return lastName;

}

}

package jdbcPack;

import org.junit.\*;

import static org.junit.Assert.\*;

import org.junit.Test;

public class TestPerson2 {

@Test

public void testGetFullName()

{

System.out.println("From TestPerson2");

Person per=new Person("Robert","King");

assertEquals("Robert King",per.getFullname());

}

@Test(expected= IllegalArgumentException.class)

public void testNullslnName()

{

System.out.println("from TestPerson2 testing exceptions");

Person per1=new Person(null,null);

}

}

OUTPUT: -

From TestPerson2

from TestPerson2 testing exceptions

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8.2)

package jdbcPack;

public class Date

{

int intDay;

int intMonth;

int intYear;

Date(int intDay, int intMonth, int intYear) {

this.intDay = intDay;

this.intMonth = intMonth;

this.intYear = intYear;

}

// setter and getter methods

void setDay(int intDay)

{

this.intDay = intDay;

}

int getDay( )

{

return this.intDay;

}

void setMonth(int intMonth)

{

this.intMonth = intMonth;

}

int getMonth( )

{

return this.intMonth;

}

void setYear(int intYear)

{

this.intYear=intYear;

}

int getYear( )

{

return this.intYear;

}

public String toString()

{

return "Date is :"+intDay+"/"+intMonth+"/"+intYear;

}

} // Date class

package jdbcPack;

import static org.junit.Assert.\*;

import org.junit.Test;

public class TestPerson

{

@Test

public void SetDay()

{

System.out.println("from TestPerson");

Date dt=new Date(1,12,1999);

assertEquals(1,dt.getDay());

}

@Test

public void SetMonth()

{

System.out.println("from TestPerson");

Date dt=new Date(1,12,1999);

assertEquals(12,dt.getMonth());

}

@Test

public void SetYear()

{

System.out.println("from TestPerson");

Date dt=new Date(1,12,1999);

assertEquals(1999,dt.getYear());

}

}

OUTPUT: -

from TestPerson

from TestPerson

from TestPerson

10.1: Write a program to store a person details in a properties file named as “PersonProps.properties” and also do the following tasks:

a) Read data from properties file, load the data into Properties object and display the data in the console.

b) Read data from properties file(using getProperties method) and print data in the console

package Lab10;

import java.io.FileReader;

import java.io.IOException;

import java.util.Properties;

public class PersonProps {

public static void main(String args[]) throws IOException

{

FileReader fr=new FileReader("F:\\cap\\details.properties.txt");

Properties p=new Properties();

p.load(fr);

System.out.println("Properties after loading : \n"+p);

System.out.println("\nafter using getproperty :");

System.out.println(p.getProperty("Name"));

System.out.println(p.getProperty("Phno"));

}

}