**ASSIGNMENT 12: File Handling & Exception Handing**

**1.Write a java program to concatenate a given string with itself of a given no of times**

**import** java.util.Scanner;

**public** **class** Concatenate {

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

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

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

System.***out***.println("Enter the String");

String str=sc.next();

System.***out***.println("How many times You want to repeat");

**int** n=sc.nextInt();

**for**(**int** i=1;i<=n;i++)

{

System.***out***.println(str.concat(" "+str));

}

}

}

**Output:**

Enter the String

HELLO

How many times You want to repeat

3

HELLO HELLO

HELLO HELLO

HELLO HELLO

**2.Write a java program to count occurrences of certain character in a given string**

**import** java.util.Scanner;

**public** **class** Count {

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

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

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

System.***out***.println("Enter the String");

sc.nextLine();

String str=sc.nextLine();

System.***out***.println("Enter the character to search");

**char** ch=sc.next().charAt(0);

**int** count=0;

**char**[]array=str.toCharArray();

**for**(**int** i=0;i<array.length;i++)

{

**if**(ch==array[i])

count++;

}

System.***out***.println("occurence of '"+ch+"' : "+count+" times");

sc.close();

}

**Output:**

Enter the String

HELLO

Enter the character to search

L

occurence of 'L' : 2 times

**3.Write a java program to compare a two given strings v. Two strings are lexicographically equal if they are the same length and contain the same character in the same position.**

**import** java.util.Scanner;

**public** **class** Lexicographically {

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

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

System.***out***.println("enter the first string");

String str=sc.next();

System.***out***.println("Enter the second string");

String str1=sc.next();

**int** count=0;

**char**[]array=str.toCharArray();

**char**[]array1=str1.toCharArray();

**for**(**int** i=0;i<array1.length;i++)

{

**if**(array[i]==array1[i])

{

count++;

}

}

**if**(count==array.length)

{

System.***out***.println("equal");

}

**else**

{

System.***out***.println("not equal");

}

}

}

**Output1:**

enter the first string

Akash

Enter the second string

Akash

Equal

**Output12:**

enter the first string

Akash

Enter the second string

Akass

not equal

**4 .Polymens a famous news editor, has daily responsibility of deciding which news stories are**

**printed in the paper. Before that he wants to verify all the words are spelled in a right way.**

**Incase of any misspelled word found, he has to replace it throughout the document without**

**any fail. Polymens needs an application to make his find and replace job easier.**

**Implement the given scenario and code accordingly.**

**import** java.util.Scanner;

**public** **class** FindAndReplace {

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

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

System.***out***.println("Enter the string");

String str=sc.nextLine();

System.***out***.println("Enter the word to be searhed");

String str1=sc.nextLine();

System.***out***.println("Enter the word tobe replaced");

String str2=sc.nextLine();

**try** {

**if**(str.contains(str1))

{

System.***out***.println(str.replace(str1,str2));

}

**else**

{

System.***out***.println(str1+" not found");

}

}

**catch**(Exception e)

{

System.***out***.println("Error");

}

}}

**Output:**

Enter the string

Have a nice day

Enter the word to be searhed

nice

Enter the word tobe replaced

good

Have a good day

**5 .Persist Employee**

**import** java.io.Serializable;

**public** **class** Employee **implements** Serializable {

/\*\*

\*

\*/

**private** **static** **final** **long** ***serialVersionUID*** = 1L;

**private** **int** employeeId;

**private** String name;

**private** **float** appraisalRating;

**public** **int** getEmployeeId() {

**return** employeeId;

}

**public** **void** setEmployeeId(**int** employeeId) {

**this**.employeeId = employeeId;

}

**public** String getName() {

**return** name;

}

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

**this**.name = name;

}

**public** **float** getAppraisalRating() {

**return** appraisalRating;

}

**public** **void** setAppraisalRating(**float** appraisalRating) {

**this**.appraisalRating = appraisalRating;

}

**public** Employee(**int** employeeId, String name, **float** appraisalRating) {

**super**();

**this**.employeeId = employeeId;

**this**.name = name;

**this**.appraisalRating = appraisalRating;

}}

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**import** java.io.FileInputStream;

**import** java.io.FileNotFoundException;

**import** java.io.FileOutputStream;

**import** java.io.IOException;

**import** java.io.ObjectInputStream;

**import** java.io.FileWriter;

**import** java.io.ObjectOutputStream;

**import** java.util.ArrayList;

**import** java.util.Iterator;

**import** java.util.List;

**public** **class** EmployeeUtility

{

**public** **boolean** addEmployee(String fileName,ArrayList<Employee>employeeList) **throws**

FileNotFoundException, IOException

{

ObjectOutputStream obj=**new** ObjectOutputStream(**new**

FileOutputStream(fileName));

obj.writeObject(employeeList);

obj.close();

**return** **true**;

}

**public** Employee viewEmployeeById(String fileName,**int** employeeId) **throws**

ClassNotFoundException, IOException

{

ObjectInputStream obj=**new** ObjectInputStream(**new** FileInputStream(fileName));

List<Employee>list=(List<Employee>) obj.readObject();

Iterator<Employee> it=list.iterator();

**while**(it.hasNext())

{

Employee emp=it.next();

**if**(emp.getEmployeeId()==employeeId)

{

**return** emp;

}**else**

{

**continue**;

}

}

**return** **null**;

}

}

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import java.io.FileNotFoundException;

import java.io.IOException;

import java.util.ArrayList;

import java.util.List;

public class Main {

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

ClassNotFoundException {

EmployeeUtility emp1=new EmployeeUtility();

ArrayList<Employee>arraylist=new ArrayList<Employee>();

arraylist.add(new Employee(101,"sam",345.56f));

arraylist.add(new Employee(102,"harry",323.56f));

emp1.addEmployee("akash.txt", arraylist);

Employee emp2=emp1.viewEmployeeById("akash.txt", 102);

System.out.println(emp2.getName()+" "+emp2.getEmployeeId()+" "+emp2.getAppraisalRating());

}}

**Output:** harry 102 323.56

**6 .Visitors Details**

//import necessary packages

import java.io.\*;

import java.util.\*;

@SuppressWarnings("unchecked")//Do not delete this line

public class FileManager

{

static public File createFile()

{

File file =new File("visitors.txt");

try{ file.createNewFile();}

catch (IOException e)

{

e.printStackTrace(); //prints exception if any

}

return file;

}

//change the return type as per the requirement

static public void writeFile(File f, String record)

{ try {

BufferedWriter out = new BufferedWriter(

new FileWriter(f.getName(), true));

out.write(record+";");

out.close();

}

catch (IOException e) {

System.out.println("exception occoured" + e);

} }

static public String[] readFile(File f)

{

List<String> tokens = new ArrayList<String>();

try{

File myObj = new File(f.getName());

Scanner myReader = new Scanner(myObj);

while (myReader.hasNextLine()) {

// String [] arr= myReader.nextLine().split(";");

// tokens = Arrays.asList(arr);

tokens.add(myReader.nextLine());

}

myReader.close();

}

catch (FileNotFoundException e) {

System.out.println("An error occurred.");

e.printStackTrace();

}

String[] tokenArray = tokens.toArray(new String[0]);

//=tokenArray.split(";");

return tokenArray;

}

}

@SuppressWarnings("unchecked")//Do not delete this line

class Main

{

public void abcd(){

Scanner in = new Scanner(System.in);

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

String name=in.next();

System.out.println("Enter Phone Number");

long phone=in.nextLong();

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

String id= in.next();

FileManager f= new FileManager();

File x =f.createFile();

f.writeFile(x,name+","+phone+","+id**);**

System.out.println("Do you want to enter another record(yes/no)");

String choice=in.next();

if(choice.equals("yes")){

abcd();

}

if(choice.equals("no"))

{String []q=f.readFile(x);

String pl[]=q[0].split(";");

for(int i=0;i<pl.length;i++)

{

System.out.println(pl[i]);

}

System.exit(0);

}

}

public static void main(String[] args)

{

Main asd=new Main();

asd.abcd(); }

}

**Output:**

Enter Name

sam

Enter Phone Number

90084747

Enter Email

ajaja@gmail.com

Do you want to enter another record(yes/no)

yes

Enter Name

jhon

Enter Phone Number

745747574

Enter Email

jhon12@gmail.com

Do you want to enter another record(yes/no)

no

karan,3827382778,cgwgcwcgwcg

sam,90084747,ajaja@gmail.com

jhon,745747574,jhon12@gmail.com

**7. Retrieving Data from file**

**Allen started working with I/O in java. Allan's mam has written some contents in the log.txt**

**file. Help Allen to write a java code to display the contents of the file in the console.**

import java.io.BufferedReader;

import java.io.BufferedWriter;

import java.io.FileReader;

import java.io.FileWriter;

import java.io.IOException;

public class Allen {

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

BufferedWriter writer=new BufferedWriter(new FileWriter("log.txt"));

writer.write("hello allen\n");

writer.write("how are you\n");

writer.close();

BufferedReader reader=new BufferedReader(new FileReader("log.txt"));

String s;

while((s=reader.readLine())!=null)

{

System.out.println(s);

}

reader.close();

}}

**Output:**

hello allen

how are you