Q1a. Write a java program to read the characters from a file, if a character is alphabet then reverse its case, if not then display its category on the Screen.(whether it is Digit or Space)

Solution:

import java.io.\*;

class DriverApp

{

public static void main(String args[])

{

try

{

FileInputStream f1;

int c;

f1 = new FileInputStream("xyz.txt");

c=f1.read();

while(c!=-1)

{

if(Character.isUpperCase((char)c))

{

c = Character.toLowerCase((char)c);

System.out.println((char)c);

}

else

{

c = Character.toUpperCase((char)c);

System.out.println((char)c);

}

if(Character.isDigit((char)c))

{

System.out.println((char)c + " is a digit");

}

if(Character.isSpaceChar((char)c))

{

System.out.println((char)c + " is a space");

}

c=f1.read();

}

f1.close();

}

catch(Exception e)

{

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

}

}

}

q2)Write a java program to display the contents of a file in reverse order.

Solution

import java.io.\*;

import java.\*;

class DriverApp

{

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

{

FileInputStream f1;

int c;

StringBuffer tmp= new StringBuffer("");

String ch;

f1 = new FileInputStream("abc.txt");

c=f1.read();

while(c!=-1)

{

tmp.append((char)c);

c=f1.read();

}

for(int i=tmp.length()-1;i>=0;i--)

System.out.print(tmp.charAt(i));

}

}

q3)Write a java program to accept list of file names through command line and delete the files having extension “.txt”. Display the details of remaining files such as FileName and size.

Solution:

import java.io.\*;

import java.util.\*;

class DriverApp

{

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

{

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

{

File file=new File(args[i]);

if(file.isFile()==true)

{

System.out.println(file.getName() + " " + file.length());

}

}

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

{

if(args[i].endsWith("txt"))

{

File tmp=new File(args[i]);

tmp.delete();

System.out.println(args[i] + " File is Deleted");

}

}

}

}

q4) Write a java program to copy the contents of one file into the another file, while copying change the case of alphabets and replace all the digits by ‘\*’ in target file

Solution:

import java.io.\*;

class DriverApp

{

public static void main(String args[])

{

try

{

FileInputStream f1;

FileOutputStream f3;

int c;

f1 = new FileInputStream(args[0]);

f3 = new FileOutputStream(args[1]);

c=f1.read();

while(c!=-1)

{

if(Character.isUpperCase((char)c))

c = Character.toLowerCase((char)c);

else

c = Character.toUpperCase((char)c);

if(Character.isDigit((char)c))

c='\*';

f3.write((char)c);

c=f1.read();

}

f1.close();

f3.close();

}

catch(Exception e)

{

System.out.println(e);

}

}

}

q5) Write a java program that displays the number of characters, lines & words from a file. Solution:

import java.io.\*;

class DriverApp

{

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

{

int i;

int line=1,word=1,ch=0;

FileInputStream fin;

try {

fin = new FileInputStream(args[0]);

} catch(FileNotFoundException e) {

System.out.println("Input File Not Found");

return;

}

try {

do {

i = fin.read();

ch++;

if(i==13 || i== 9 || i==32)

word++;

if(i==13)

line++;

} while(i != -1);

} catch(IOException e) {

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

}

fin.close();

System.out.println("Number of Characters are " + ch);

System.out.println("Number of Words are " + word);

System.out.println("Number of Lines are " + line);

}

}

q6) **How do you write data to a text file in Java?**

try (BufferedWriter bw = new BufferedWriter(new FileWriter("output.txt"))) {

bw.write("Hello, world!");

} catch (IOException e) {

e.printStackTrace();

}

q7) **How can you read data from a text file in Java?**

try (BufferedReader br = new BufferedReader(new FileReader("sample.txt"))) {

String line;

while ((line = br.readLine()) != null) {

System.out.println(line);

}

} catch (IOException e) {

e.printStackTrace();

}

q8) **How can you delete a file in Java? Provide an example.**

import java.io.File;

public class FileDeletionExample {

public static void main(String[] args) {

File fileToDelete = new File("example.txt");

if (fileToDelete.delete()) {

System.out.println("File deleted successfully.");

} else {

System.err.println("Failed to delete file.");

}

}

}

q9) **Creating a Folder, Creating Files, Writing and Reading Text Files in Java**

File folder = new File("myFolder");

if (!folder.exists()) {

if (folder.mkdir()) {

System.out.println("Folder created successfully.");

} else {

System.err.println("Failed to create folder.");

}

}

// Creating a text file and writing data to it

try (FileWriter writer = new FileWriter("myFolder/example.txt")) {

writer.write("This is some data.");

System.out.println("Data written to file successfully.");

} catch (IOException e) {

System.err.println("Error writing to file: " + e.getMessage());

}

// Reading data from the text file

try (BufferedReader reader = new BufferedReader(new FileReader("myFolder/example.txt"))) {

String line;

while ((line = reader.readLine()) != null) {

System.out.println("Read: " + line);

}

} catch (IOException e) {

System.err.println("Error reading file: " + e.getMessage());

}

}

}