# Exercise on file programming

1. Write a program that counts the number of times a particular character, appears in a file. The character can be read from the user through keyboard. You can use srm.txt as the input file.

#### A. Code:-

```
import java.io.*;
import java.util.Scanner;
public class one {
  public static void main(String[] args)throws IOException
     String fileName = ""D:\JAVA\srm.txt.txt"";
     String line = "";
     Scanner myObj = new Scanner(System.in);
     char user = myObj.next().charAt(0);
     Scanner scanner = new Scanner(new FileReader(fileName));
     try {
      while ( scanner.hasNextLine() ){
       line = scanner.nextLine();
       int counter = 0;
       for( int i=0; ilength(); i++ ) {
          if( line.charAt(i) == user ) {
            counter++;
          }
```

```
System.out.println(counter);
}
finally {
scanner.close();
}
}
```

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\Lenovo> & 'C:\Program Files\Java\jdk-18\bin\java.exe' '-agentlib:jdwp=transport=dt_socket,server=n,suspend=y,address=lo calhost:57336' '--enable-preview' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\Lenovo\AppData\Local\Temp\vscodesws_c971 b\jdt_ws\jdt.ls-java-project\bin' 'Main'

15
```

# 2. Write a Java program to read a file content (srm.txt) line by line.

# A. Code:-

```
import java.io.BufferedInputStream;
import java.io.FileInputStream;

class Main {
   public static void main(String[] args) {
     try {
       FileInputStream file = new FileInputStream("D:\JAVA\srm.txt.txt");
       BufferedInputStream input = new BufferedInputStream(file);
     int i = input .read();
     while (i != -1) {
```

```
System.out.print((char) i);

i = input.read();
}
input.close();
}

catch (Exception e) {
  e.getStackTrace();
}
}
```

```
Microsoft Windows [Version 10.0.22000.613]
(c) Microsoft Corporation. All rights reserved.

D:\>javac ReadFile.java

D:\>java ReadFile
SRM University, Annhra Pradesh, also known as SRM University, Amaravati, is a private university located near Neerukonda village in Mangalagiri mandal of Guntur district in Andhra Pradesh, located near Neerukonda village in Mangalagiri mandal of Guntur district in Andhra Pradesh, located near Neerukonda village in Mangalagiri mandal of Guntur district in Andhra Pradesh, located near Neerukonda village in Mangalagiri mandal of Guntur district in Andhra Pradesh, located near Neerukonda village in Mangalagiri mandal of Guntur district in Andhra Pradesh, located near Neerukonda village in Mangalagiri mandal of Guntur district in Andhra Pradesh, located near Neerukonda village in Mangalagiri mandal of Guntur district in Andhra Pradesh, located near Neerukonda village in Mangalagiri mandal of Guntur district in Andhra Pradesh, located near Neerukonda village in Mangalagiri mandal of Guntur district in Andhra Pradesh, located near Neerukonda village in Mangalagiri mandal of Guntur district in Andhra Pradesh, located near Neerukonda village in Mangalagiri mandal of Guntur district in Andhra Pradesh, located near Neerukonda village in Mangalagiri mandal of Guntur district in Andhra Pradesh, located near Neerukonda village in Mangalagiri mandal of Guntur district in Andhra Pradesh, located near Neerukonda village in Mangalagiri mandal of Guntur district in Andhra Pradesh, located near Neerukonda village in Mangalagiri mandal of Guntur district in Andhra Pradesh, located near Neerukonda village in Mangalagiri mandal of Guntur district in Andhra Pradesh, located near Neerukonda village in Mangalagiri mandal of Guntur district in Andhra Pradesh, located near Neerukonda village in Mangalagiri mandal of Guntur district in Andhra Pradesh, located near Neerukonda village in Mangalagiri mandal of Guntur district in Andhra Pradesh, located near Neerukonda village in Mangalagiri mandal of Guntur di
```

3. Write a Java program to append text the following text to an existing file (srm.txt) Text to be appended Embark on the avenues of excellence with SRM University-AP! Believing in the power of education to transform lives, our interdisciplinary research-oriented undergraduate, postgraduate, and doctoral programmes ensure global exposure and entrepreneurial experience to our students. We are a thriving intellectual community prepared for a dynamic world.

```
A. <u>Code:-</u>
import java.io.*;
class WriteFile
```

```
public static void main(String[] args)
{
   String str= "Embark on the avenues of excellence with SRM University-AP! Believing in the power of education to transform lives, our interdisciplinary research-oriented undergraduate, postgraduate, and doctoral programmes ensure global exposure and entrepreneurial experience to our students. We are a thriving intellectual community prepared for a dynamic world.";
   try
   {
      FileWriter fw=new FileWriter("D:\JAVA\srm.txt.txt",true);
      fw.write(str);
      fw.close();
   }
   catch(IOException e){}
```

```
Microsoft Windows [Version 10.0.22000.613]

(c) Microsoft Corporation. All rights reserved.

D:\>javac WriteFile.java

D:\>java WriteFile

D:\\text{Vtype D:\\text\str}

SRM University, Amaravati, is a private university located near Neerukonda village in Mangalagiri mandal of Guntur district in Andhra Pradesh, India, in the area of the planned capital city Amaravati.

Enbark on the avenues of excellence with SRM University-API Believing in the power of education to transform lives, our interdisciplinary research-oriented undergraduate, postgrad uate, and doctoral programmes ensure global exposure and entrepreneurial experience to our students. We are a thriving intellectual community prepared for a dynamic world. Embark on the avenues of excellence with SRM University-API Believing in the power of education to transform lives, our interdisciplinary research-oriented undergraduate, postgraduate, and doctoral programmes ensure global exposure and entrepreneurial experience to our students. We are a thriving intellectual community prepared for a dynamic world. Embark on the avenues of excellence with SRM University-API Believing in the power of education to transform lives, our interdisciplinary research-oriented undergraduate, postgraduate, and doctoral programmes ensure global exposure and entrepreneurial experience to our students. We are a thriving intellectual community prepared for a dynamic world.
```

# 4. Write a Java program to find the longest word in a text file (srm.txt)

# A. Code:-

```
import java.util.Scanner;
import java.io.File;
import java.io.FileNotFoundException;

class program4{
    public static void main(String [ ] args) throws FileNotFoundException {
        new program4().findLongestWords();
    }

    public String findLongestWords() throws FileNotFoundException {
```

```
String longest_word = "";
String current;
Scanner sc = new Scanner(new File("D:\JAVA\srm.txt.txt"));
while (sc.hasNext()) {
    current = sc.next();
    if (current.length() > longest_word.length()) {
        longest_word = current;
    }
}
System.out.println("\n"+longest_word+"\n");
    return longest_word;
    }
}
```

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows
PS D:\> Javac Problem4.java
PS D:\> Java Problem4
interdisciplinary
```