

**Aim:** Write a java program that displays the number of characters, lines and words in a text file.

**Description:**

**File(String pathname):**

This function is present under the **java.io.File** package.

It creates a new File instance by converting the given pathname string into an abstract pathname.

**FileInputStream(File file) :**

This function is present under the **java.io.FileInputStream** package.

It creates a FileInputStream by opening a connection to an actual file named by the File object file in the file system.

**InputStreamReader(InputStream in):**

This function is present under the **java.io.InputStreamReader** package.

It creates an InputStreamReader that uses the default charset.

**BufferedReader(Reader in):**

This function is present under the **java.io.BufferedReader** package.

It creates a buffering character-input stream that uses a default-sized input buffer.

**Program:**

```
import java.io.File;
import java.io.FileInputStream;
import java.io.InputStreamReader;
import java.io.BufferedReader;
import java.io.IOException;

public class CountLinesWordsChars
{
    public static void main(String[] args) throws IOException
    {
        File file = new File("D:\\ACEM\\II CSE JAVA LAB\\smilejava.txt");
        FileInputStream fileInputStream = new FileInputStream(file);
        InputStreamReader inputStreamReader = new InputStreamReader(fileInputStream);
        BufferedReader bufferedReader = new BufferedReader(inputStreamReader);

        String line;
        int lines=0;
        int wordCount = 0;
        int characterCount = 0;

        while ((line = bufferedReader.readLine()) != null)
        {
            lines++;
            characterCount += line.length();
            String words[] = line.split("\\s+");
            wordCount += words.length;
        }
    }
}
```

```

        System.out.println("Total word count = "+ wordCount);
        System.out.println("Total number of lines = "+ lines);
        System.out.println("Total number of characters = "+ characterCount);
    }
}

```

**Output:**

D:\ACEM\II CSE Bsection>javac CountLinnesWordsChars.java

D:\ACEM\II CSE Bsection>java CountLinnesWordsChars

Total word count = 6

Total number of lines = 6

Total number of characters = 26

b) **Aim :** Write a java program that reads a file and displays the file on the screen with line number before each line.

**Description:**

- import java packages
- Create class ReadFileForLine
- Create main function
- public static void main( String[] args)throws IOException and write rest of the code

**Program:**

```

import java.io.File;
import java.io.FileReader;
import java.io.LineNumberReader;
import java.io.FileNotFoundException;
import java.io.IOException;
import java.util.Scanner;

```

```

class ReadFileForLine

```

```

{
    public static void main(String[] args)
    {
        Scanner input = new Scanner(System.in);
        System.out.print("Enter the name of the file: ");
        String file_name = input.nextLine();
        File f = new File(file_name);

        int i;
        boolean wrong=true;
        while(wrong)
        {
            try
            {
                FileReader finp = new FileReader(f);
                LineNumberReader linereader = new LineNumberReader(finp);

```

```

        while((i=linereader.read())!=-1)
        {
            System.out.print("Line #: "+(linereader.getLineNumber()+1));
            System.out.println((char)i+linereader.readLine());
        }

        wrong=false;
    }
    catch(FileNotFoundException e)
    {
        System.out.println("File does not exist, ");
        System.out.print("Enter another file name:");
        file_name = input.nextLine();
        f = new File(file_name);
    }
    catch(IOException e)
    {
        System.out.println("Cannot Read file:");
    }
}
}
}

```

**Output:**

D:\ACEM\II CSE Bsection>javac ReadFileForLine.java

D:\ACEM\II CSE Bsection>java ReadFileForLine

Enter the name of the file: smilejava.txt

Line #: 1hello

Line #: 2keep

Line #: 3smiling

Line #: 4java

Line #: 5is

Line #: 6easy