

Assignment 6

File I/O problem

Create new file 'test.txt'.

Write a data in it of about 300 words.

Read a file 'test.txt'.

Calculate the letter in it (a, b, c, d, ...)

constant in that file (b, c, d, f, ...)

Vowels in that file (a, e, i, o, u).

Words in a complete file ("JAVA")

Calculate how many time one character is repeated. (a = 10, b = 50, z = 34, ...)

Save that file with other name 'test-copy.txt'.

```
import java.io.*;
import java.util.*;
class Createfile
{
    static final int MAX-CHAR = 256;
    static int countchar(String str)
    {
        int counts[] = new int [MAX-CHAR];
        int len = str.length();
        for(int i2=0 ; i2<len ; i2++)
        {
            chz[i2] = str.charAt(i2);
            int find = 0;
```

```
for (int j2 = 0; j2 <= i2; j2++)  
    if (str.charAt(i2) == chz[j2])  
        find++;  
if (find == 1) {  
    System.out.println("Number of Occurrences of " + str.charAt(i2) +  
        " is: " + countS[str.charAt(i2)]);  
}  
return 0;
```

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

```
    String str = "File Handling in Java  
Using " + "FileWriter and FileReader  
in java" + Java's FileWriter and  
FileReader classes are used to write
```

```
and read data from text files they  
are character stream classes It is re-
```

```
commended not to use the FileInputStream  
and FileOutputStream classes if you to
```

```
read and write any textual information
```

```
as these are Byte Stream classes " +
```

```
"FileWriter is useful to create a File
```

writing characters into it. This class inherits from the OutputStream class. The constructors of this class assume that the default character encoding and the default byte buffer size are acceptable. To specify these values yourself, construct an OutputStreamWriter on a FileOutputStream. + "FileWriter is meant for writing streams of characters. For writing streams of raw bytes consider using a FileOutputStream." + "constructors FileWriter file file constructs" + "a FileWriter object given a file object. FileWriter file boolean append constructs a FileWriter object given a file object. FileWriter fileDescriptor fd constructs a FileWriter object associated with a file descriptor. FileWriter string filename constructs a FileWriter object given a " + "file name". FileWriter string filename boolean append constructs a FileWriter object given a " + "file name". FileWriter string filename boolean append constructs a FileWriter object given a " + "file name". FileWriter string filename boolean append constructs a FileWriter object given a " + "file name" with a Boolean indicating whether or

not to append the data writing "+" This class inherits from the `InputStreamReader` class. The constructors "+" of this class assume that the default character encoding and the default byte buffer size are appropriate. To specify these values yourself construct an `InputStreamReader` on a `FileInputStream` "+".
"FileReader is meant for reading streams of characters "+" for reading streams of raw bytes consider using a `FileInputStream`";

```
FileWriter fw = new FileWriter("test.txt")
for (int i=0; i<str.length(); i++)
    fw.write(str.charAt(i))
System.out.println("writing successful")
fw.close()

int ch;
FileReader fr = null;
try {
    fr = new FileReader("test.txt");
}
catch (FileNotFoundException fe)
{
    System.out.println("File not found");
}
```

```

int vowels = 0, consonants = 0, p = 0;
while ((ch = fr.read()) != -1)
{
    //System.out.println((char)ch);
}

int count = 0, count_t = 0;
char ch_t;

str = str.toLowerCase();
for (int k = 0; k < str.length(); k++)
{
    if (str.charAt(k) == ' ')
        count++;
    else if (str.charAt(k) == 'a' || str.charAt(k) == 'e' || str.charAt(k) == 'i' || str.charAt(k) == 'o' || str.charAt(k) == 'u')
        vowels++;
    else
        consonants++;
}
char ch2[] = new char[str.length()];
for (int l = 0; l < str.length(); l++)

```

```
{  
    ch2[1] = str.charAt(1);  
    if (((l > 0) && (ch2[1] != ' ') && (ch2[l-1]  
        == ' ')) || ((ch2[0] != ' ') && (l == 0)))  
        count++;  
    }  
  
System.out.println("Total number of cha-  
racters in a string :" + count);  
System.out.println("Total number of vo-  
wels in test.txt file is :" + vowels);  
System.out.println("Total number of co-  
nsonants in test.txt file is :" + con-  
sonants);  
System.out.println("Total number of word  
s in test.txt file is :" + count+1);  
countchar(str);  
fr.close();  
}  
}
```