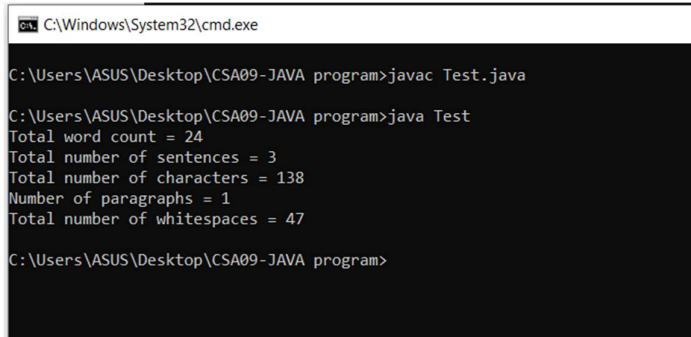


1.Program

```
import java.io.*;
public class Test {
    public static void main(String[] args)
        throws IOException
    {
        File file = new File("C:\\Users\\ASUS\\Desktop\\CSA09-JAVA program\\File1.txt");
        FileInputStream fileInputStream = new FileInputStream(file);
        InputStreamReader inputStreamReader = new InputStreamReader(fileInputStream);
        BufferedReader bufferedReader = new BufferedReader(inputStreamReader);
        String line;
        int wordCount = 0;
        int characterCount = 0;
        int paraCount = 0;
        int whiteSpaceCount = 0;
        int sentenceCount = 0;
        while ((line = bufferedReader.readLine()) != null) {
            if (line.equals("")) {
                paraCount += 1;
            }
            else {
                characterCount += line.length();
                String words[] = line.split("\\s+");
                wordCount += words.length;
                whiteSpaceCount += wordCount - 1;
                String sentence[] = line.split("[!?.:]+");
                sentenceCount += sentence.length;
            }
        }
        if (sentenceCount >= 1) {
            paraCount++;
        }
        System.out.println("Total word count = "+ wordCount);
        System.out.println("Total number of sentences = "+ sentenceCount);
        System.out.println("Total number of characters = "+ characterCount);
        System.out.println("Number of paragraphs = "+ paraCount);
        System.out.println("Total number of whitespaces = "+ whiteSpaceCount);
    }
}
```

Output:

```
C:\Windows\System32\cmd.exe

C:\Users\ASUS\Desktop\CSA09-JAVA program>javac Test.java

C:\Users\ASUS\Desktop\CSA09-JAVA program>java Test
Total word count = 24
Total number of sentences = 3
Total number of characters = 138
Number of paragraphs = 1
Total number of whitespaces = 47

C:\Users\ASUS\Desktop\CSA09-JAVA program>
```

2.Program

```
class Customer {
    int amount = 10000;

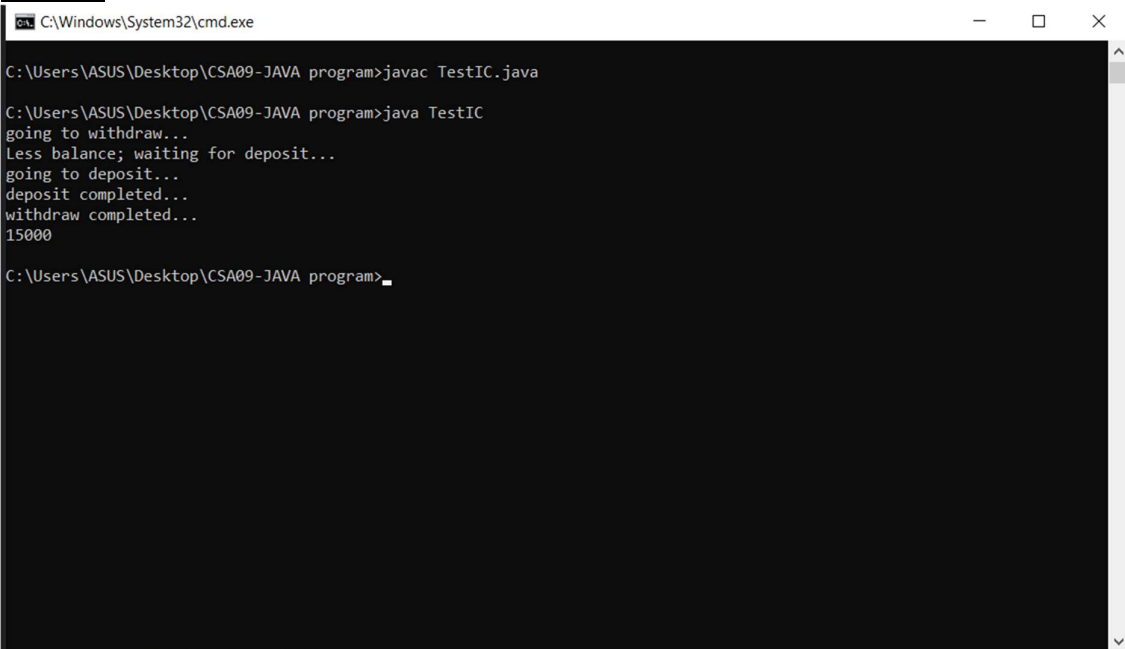
    synchronized void withdraw(int amount) {
        System.out.println("going to withdraw...");

        if (this.amount < amount) {
            System.out.println("Less balance; waiting for deposit...");
            try {
                wait();
            } catch (Exception e) {
            }
        }
        this.amount -= amount;
        System.out.println("withdraw completed...");
        System.out.println(amount);
    }

    synchronized void deposit(int amount) {
        System.out.println("going to deposit...");
        this.amount += amount;
        System.out.println("deposit completed... ");
        notify();
    }
}

class TestIC {
    public static void main(String args[]) {
        final Customer c = new Customer();
```

```
new Thread() {  
    public void run() {  
        c.withdraw(15000);  
    }  
}.start();  
new Thread() {  
    public void run() {  
        c.deposit(10000);  
    }  
}.start();  
  
}  
}
```

Output:

```
C:\Windows\System32\cmd.exe  
  
C:\Users\ASUS\Desktop\CSA09-JAVA program>javac TestIC.java  
  
C:\Users\ASUS\Desktop\CSA09-JAVA program>java TestIC  
going to withdraw...  
less balance; waiting for deposit...  
going to deposit...  
deposit completed...  
withdraw completed...  
15000  
  
C:\Users\ASUS\Desktop\CSA09-JAVA program>
```


3.Program

```
import java.io.*;  
import java.util.*;
```

```
class answer {  
    public static void main(String args[]) {  
        Scanner e = new Scanner(System.in);  
        int n = e.nextInt();  
        for (int i = 1; i <= n; i++) {  
            if (i % 3 == 0 && i % 5 == 0) {  
                System.out.print(" FiZZBUZZ\n ");  
            } else if (i % 3 == 0) {  
                System.out.print(" Fizz\n ");  
            } else if (i % 5 == 0) {  
                System.out.print(" Buzz\n ");  
            }  
        }  
    }  
}
```

```
        } else {  
            System.out.print(" " + Integer.toString(i) + " ");  
        }  
    }  
}
```

Output




```
C:\Windows\System32\cmd.exe  
  
C:\Users\ASUS\Desktop\CSA09-JAVA program>javac answer.java  
C:\Users\ASUS\Desktop\CSA09-JAVA program>java answer  
5  
1 2 "Fizz" 4 "Buzz"  
C:\Users\ASUS\Desktop\CSA09-JAVA program>
```

4.Program

```
import java.io.*;  
import java.util.*;  
public class Solution  
{  
    public static void main(String[] args) {  
        String str1, str2;  
        Scanner sc =new Scanner(System.in);  
        System.out.println("Enter the first string : ");  
        str1=sc.nextLine();  
        System.out.println("Enter the Second string : ");  
        str2=sc.nextLine();  
        if(str1.length() != str2.length()){  
            System.out.println("false");  
        }  
        else {  
            str1 = str1.concat(str1);  
            if(str1.indexOf(str2) != -1)  
                System.out.println("true");  
            else  
                System.out.println("false");  
        }  
    }  
}
```

```
    }  
  }  
}
```

Output: C:\Windows\System32\cmd.exe

```
C:\Users\ASUS\Desktop\CSA09-JAVA program>javac Solution.java
```

```
C:\Users\ASUS\Desktop\CSA09-JAVA program>java Solution
```

```
Enter the first string :
```

```
abcde
```

```
Enter the Second string :
```

```
cdeab
```

```
true
```

```
C:\Users\ASUS\Desktop\CSA09-JAVA program>_
```

5.Program:

```
class PrimeExample implements Runnable
```

```
//extends Thread
```

```
{
```

```
    public void run()
```

```
    {
```

```
        int i,m=20,flag=1;
```

```
        for(i=1;i<=m;i++)
```

```
        {
```

```
            if(i<=3){
```

```
                System.out.println(i + " is prime number");
```

```
            continue;
```

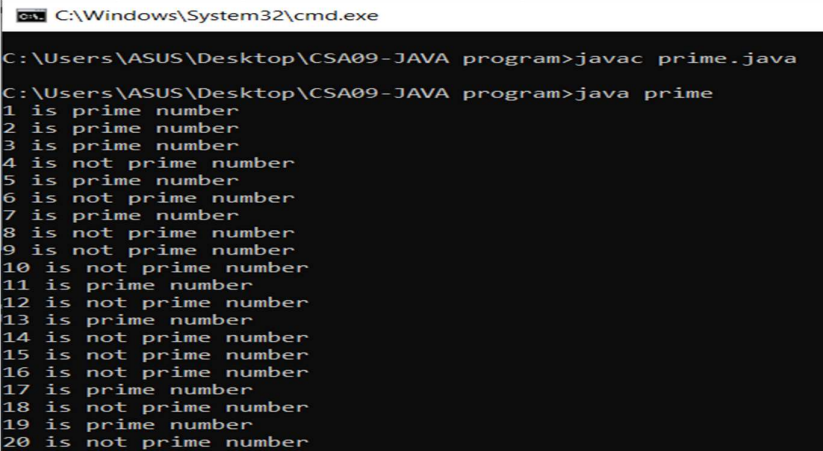
```
        }
```

```
        else if(i>3)
```

```
        {
```

```
            for(int j=2;j<i;j++)
```

```
{
    if(i%j==0)
    {
        flag=0;
        break;
    }
}
if (flag!= 1)
{
    System.out.println(i + " is not prime number");
    flag=1;
}
else
    System.out.println(i + " is prime number");
}
}
}
}
class prime
{
    public static void main(String args[]){
        try
        {
            PrimeExample p1 = new PrimeExample();
            Thread t1= new Thread(p1);
            t1.start();
        }
        catch(Exception e)
        {
            System.out.println(e.getMessage());
        }
    }
}
```

Output:

```
C:\Windows\System32\cmd.exe
C:\Users\ASUS\Desktop\CSA09-JAVA program>javac prime.java
C:\Users\ASUS\Desktop\CSA09-JAVA program>java prime
1 is prime number
2 is prime number
3 is prime number
4 is not prime number
5 is prime number
6 is not prime number
7 is prime number
8 is not prime number
9 is not prime number
10 is not prime number
11 is prime number
12 is not prime number
13 is prime number
14 is not prime number
15 is not prime number
16 is not prime number
17 is prime number
18 is not prime number
19 is prime number
20 is not prime number
```

07-04-2023

Assignment-04

Name: T. Sumanth

Reg.no: 192011452