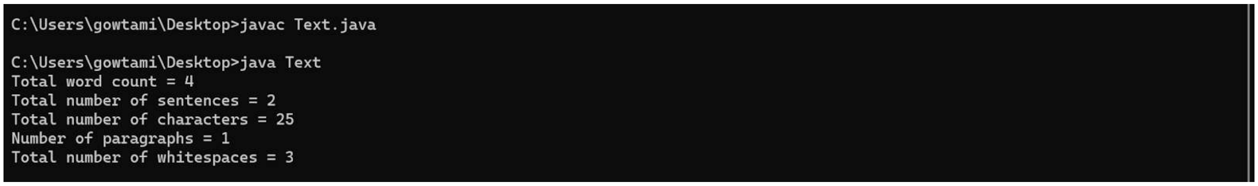
1. Text file reader:

```
import java.io.*;

public class Text {
    public static void main(String[] args)
        throws IOException
    {
        File file = new File("C:\\Users\\gowtami\\Desktop\\TextReader.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:-



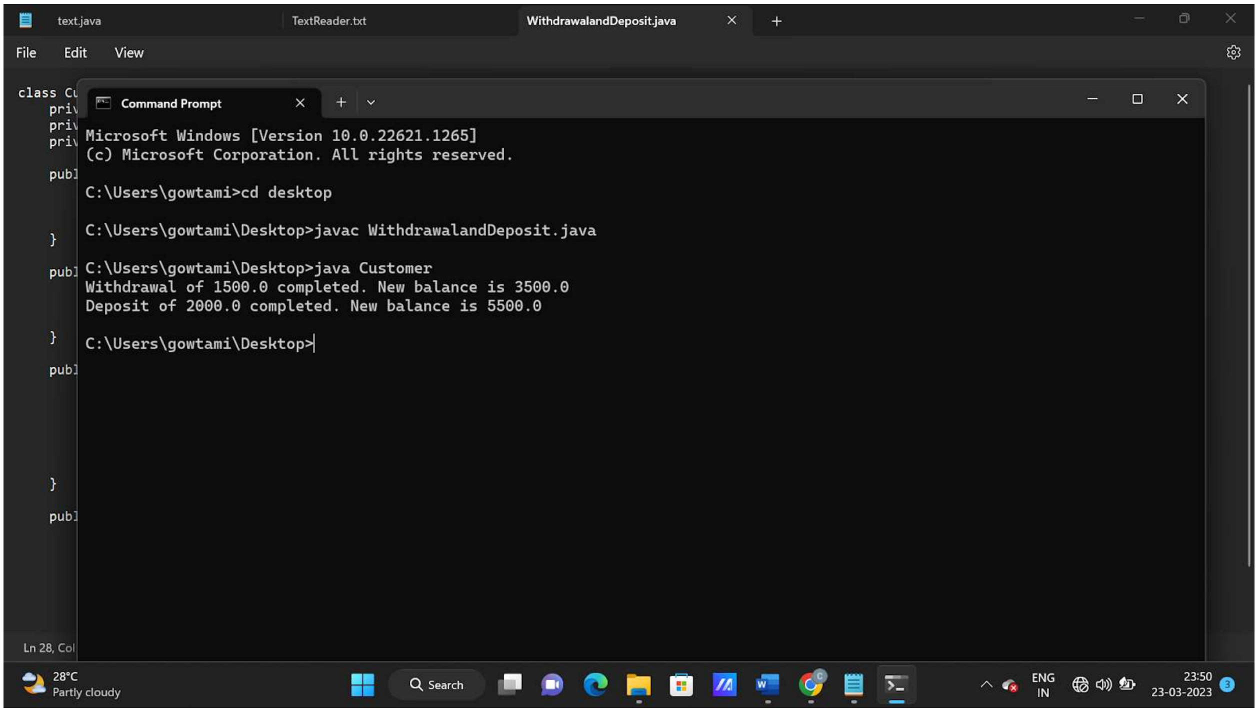
```
C:\Users\gowtami\Desktop>javac Text.java

C:\Users\gowtami\Desktop>java Text
Total word count = 4
Total number of sentences = 2
Total number of characters = 25
Number of paragraphs = 1
Total number of whitespaces = 3
```

2.Withdrawal and deposit:

```
class Customer {
  private int AccountNo;
  private String AccName;
  private double Balance;

  public Customer(int AccountNo, String AccName, double Balance) {
    this.AccountNo = AccountNo;
    this.AccName = AccName;
    this.Balance = Balance;
  }

  public synchronized void deposit(double amount) {
    Balance += amount;
    System.out.println("Deposit of " + amount + " completed. New balance is " + Balance);
    notify();
  }

  public synchronized void withdraw(double amount) throws InterruptedException {
    if (amount > Balance) {
      System.out.println("Requested amount " + amount + " is not available in balance " +
Balance + ". Waiting for deposit.");
      wait();
    }
    Balance -= amount;
    System.out.println("Withdrawal of " + amount + " completed. New balance is " + Balance);
  }

  public static void main(String[] args) {
    Customer c = new Customer(123, "John", 5000);
    double withdrawAmount = 1500;
    try {
      c.withdraw(withdrawAmount);
    } catch (InterruptedException e) {
      e.printStackTrace();
```

```
        }
        c.deposit(2000);
    }
}
```

Output:-



```
Microsoft Windows [Version 10.0.22621.1265]
(c) Microsoft Corporation. All rights reserved.

C:\Users\gowtami>cd desktop

C:\Users\gowtami\Desktop>javac WithdrawalandDeposit.java

C:\Users\gowtami\Desktop>java Customer
Withdrawal of 1500.0 completed. New balance is 3500.0
Deposit of 2000.0 completed. New balance is 5500.0

C:\Users\gowtami\Desktop>
```

3.

```
import java.io.*;
public class Fizz
{
            public List<string> FizzBuzzGame(int n)
            {
                        List<string> output = new ArrayList<>();
                        for (int i=1; i<=n; i=i+1)
                        {
                                    if(i%3 == 0 && i%5 == 0)
                                    output.add("FIzzBuzz");
                                    else if(i%3==0)
                                                output.add("Fizz");
                                    elseif(i%5==0);
                                                output.add("Buzz");
                                    else;
                                                output.add(String.valueOf(i));
                        }
            return output;
            }
}
```

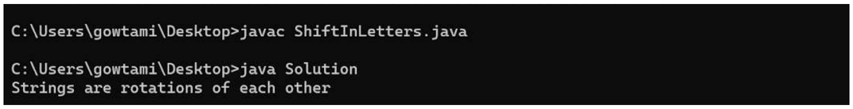
4. Shit in letters

```
import java.io.*;

import java.util.*;


class Solution
 {



    static boolean checkString(String s1, String s2,

                               int indexFound, int Size)

    {

        for (int i = 0; i < Size; i++) {


            if (s1.charAt(i)

                != s2.charAt((indexFound + i) % Size))

                return false;

        }


        return true;

    }




    public static void main(String args[])

    {
```

```
String s1 = "abcd";
String s2 = "cdab";

if (s1.length() != s2.length()) {
    System.out.println(
        "s2 is not a rotation on s1");
}
else {

    ArrayList<Integer> indexes = new ArrayList<
        Integer>();


    int Size = s1.length();

    char firstChar = s1.charAt(0);

    for (int i = 0; i < Size; i++) {
        if (s2.charAt(i) == firstChar) {
            indexes.add(i);
        }
    }

    boolean isRotation = false;
```

```
            for (int idx : indexes) {
                isRotation = checkString(s1, s2, idx, Size);

                if (isRotation)
                    break;
            }

            if (isRotation)
                System.out.println(
                    "Strings are rotations of each other");
            else
                System.out.println(
                    "Strings are not rotations of each other");
        }
    }
}
```

Output:-



```
C:\Users\gowtami\Desktop>javac ShiftInLetters.java

C:\Users\gowtami\Desktop>java Solution
Strings are rotations of each other
```

5.