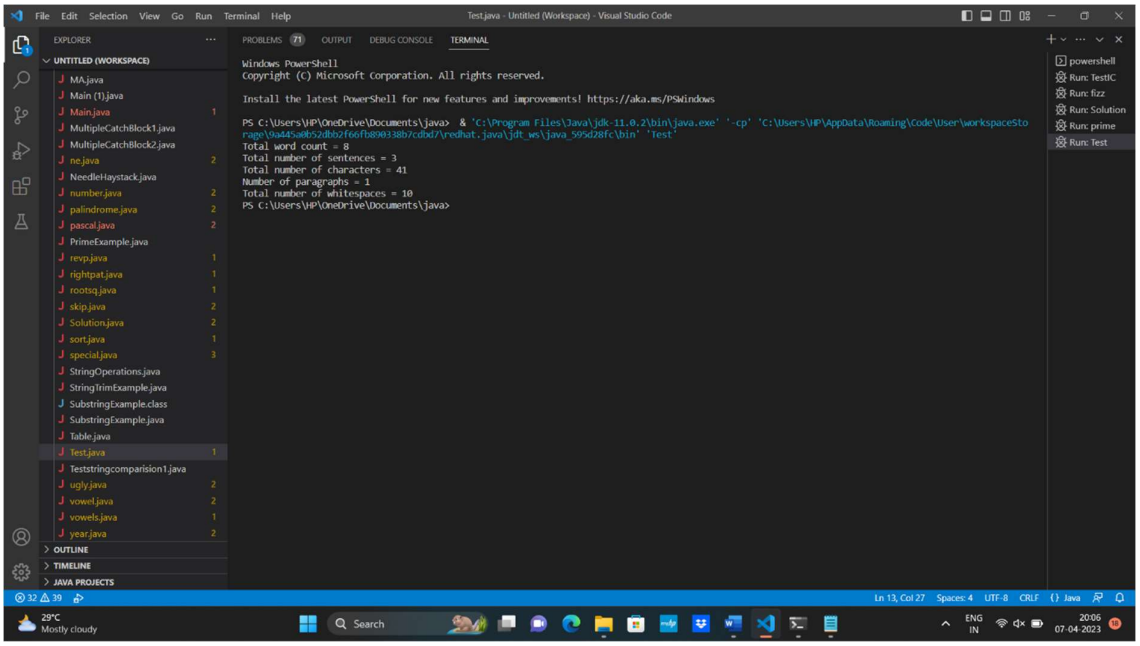
PROGRAM:1

```
import java.io.*;
public class Test {
    public static void main(String[] args)
        throws IOException
    {
        File file = new File("C:\\Users\\HP\\Desktop\\text.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:

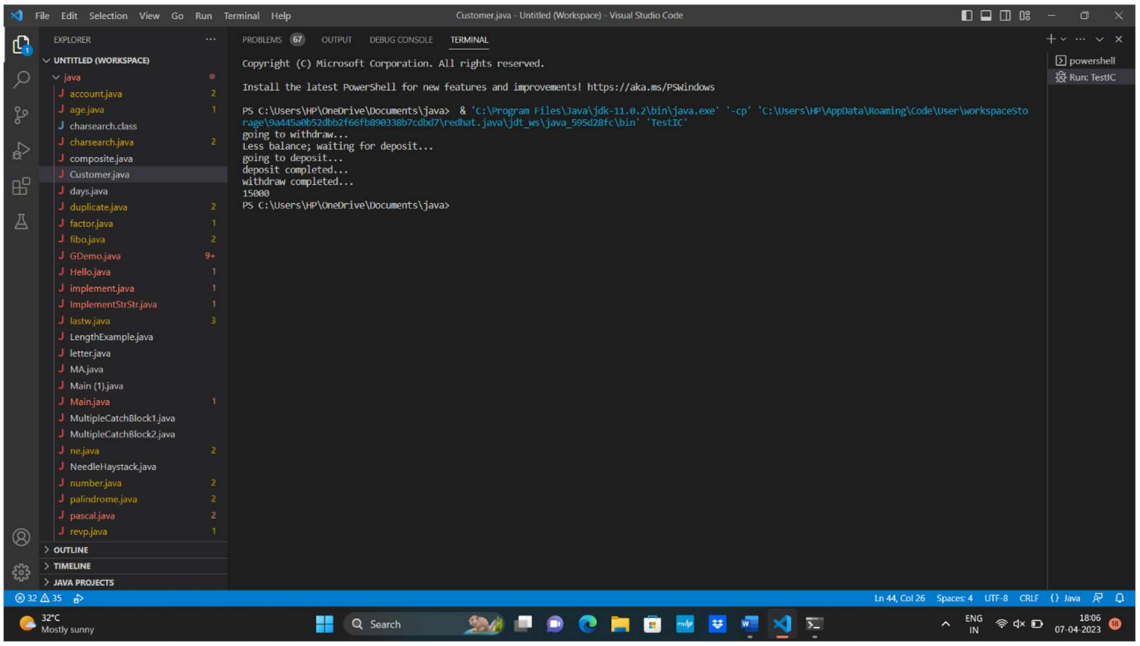


PROGRAM:2

```
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();

    }
}
```

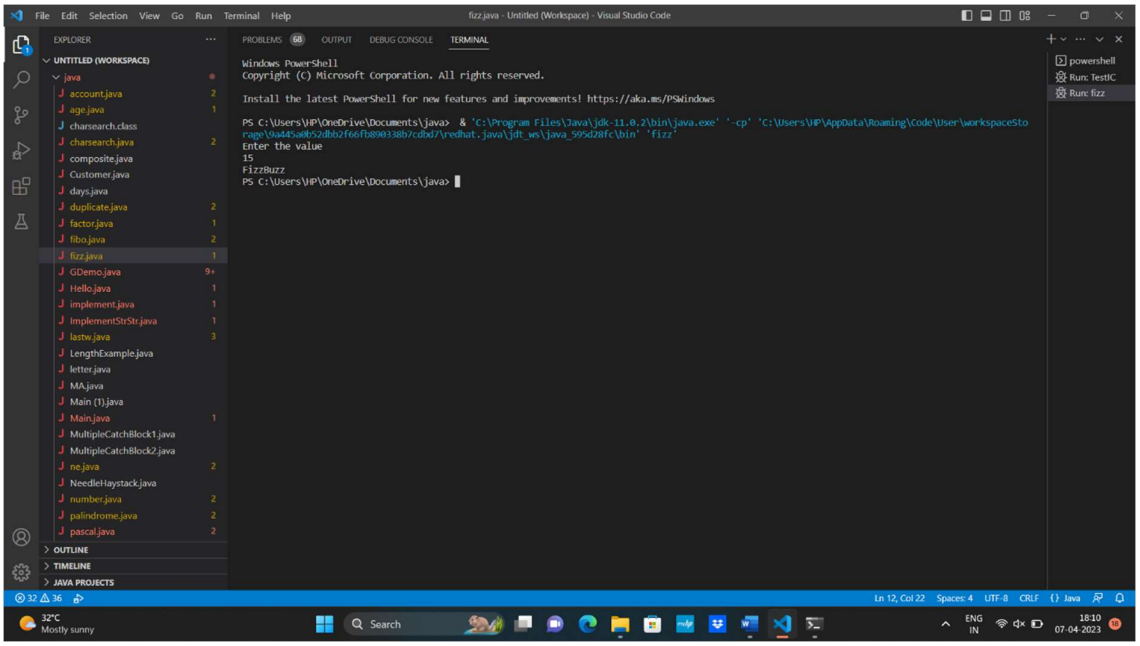
OUTPUT:



PROGRAM:3

```
import java.util.*;
class fizz
{
public static void main(String[] args)
{
 try
 {
int n;
 Scanner sc=new Scanner(System.in);
 System.out.println("Enter the value");
 n=sc.nextInt();
if (n%5==0 && n%3==0)
System.out.println("FizzBuzz");
else if (n%5==0)
System.out.println("Buzz");
else if (n%3==0)
System.out.println("Fizz");
else
 System.out.println("Enter a number divisible by 3 or 5");
}
 catch(Exception e)
 {
 System.out.println("Due to character exception");
 }
}
}
```

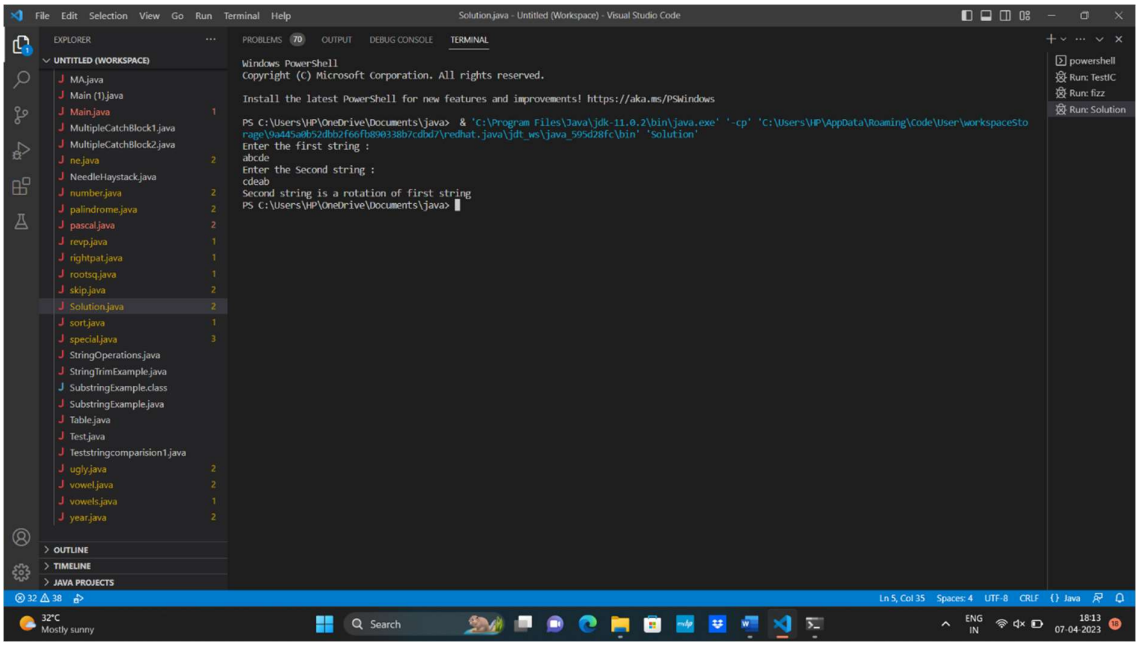
OUTPUT:



PROGRAM:4

```
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("Second string is not a rotation of first
string");
        }
        else {
            str1 = str1.concat(str1);
                        if(str1.indexOf(str2) != -1)
                System.out.println("Second string is a rotation of first
string");
            else
                System.out.println("Second string is not a rotation of first
string");
        }
    }
}
```

OUTPUT:



PROGRAM:5

```
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: