Assignment No:-30

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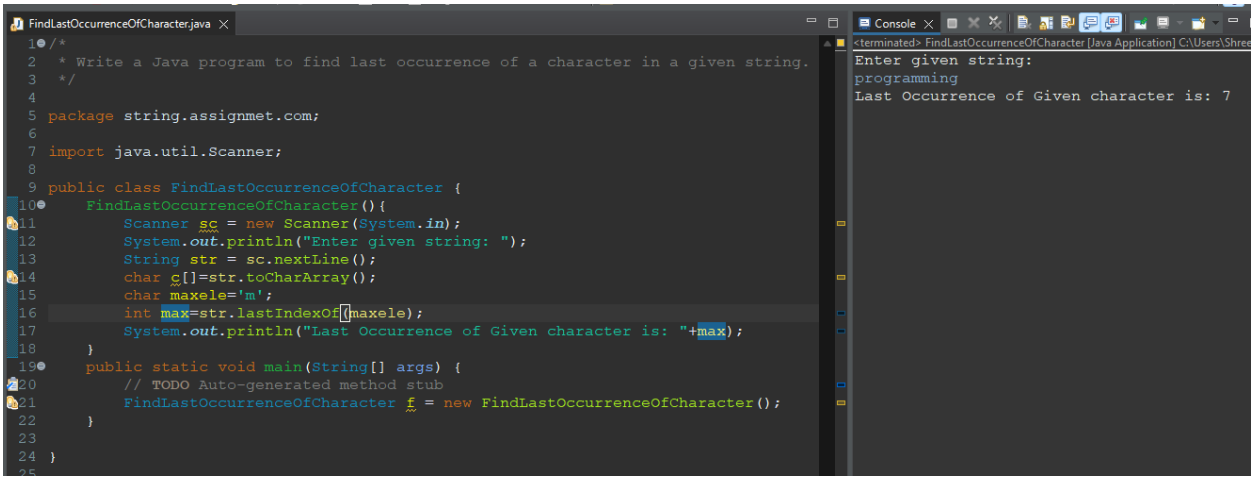
Batch: - Delta - DCA (Java) 2024 Date:-18/6/2024

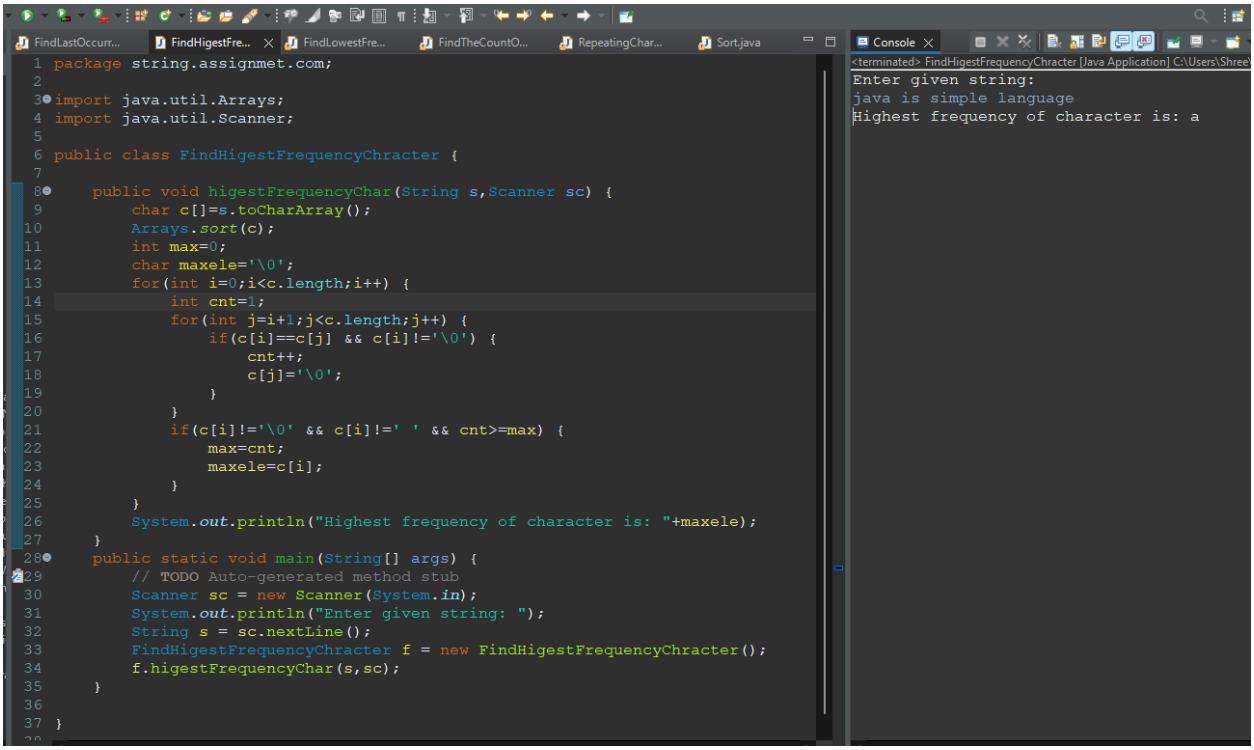
Q1.Write a Java program to find last occurrence of a character in a given string.



```java
/*
 * Write a Java program to find last occurrence of a character in a given string.
 */

package string.assignmet.com;

import java.util.Scanner;

public class FindLastOccurrenceOfCharacter {
    FindLastOccurrenceOfCharacter(){
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter given string: ");
        String str = sc.nextLine();
        char c[]=str.toCharArray();
        char maxele='m';
        int max=str.lastIndexOf(maxele);
        System.out.println("Last Occurrence of Given character is: "+max);
    }
    public static void main(String[] args) {
        // TODO Auto-generated method stub
        FindLastOccurrenceOfCharacter f = new FindLastOccurrenceOfCharacter();
    }

}
```

```
Enter given string:
programming
Last Occurrence of Given character is: 7
```

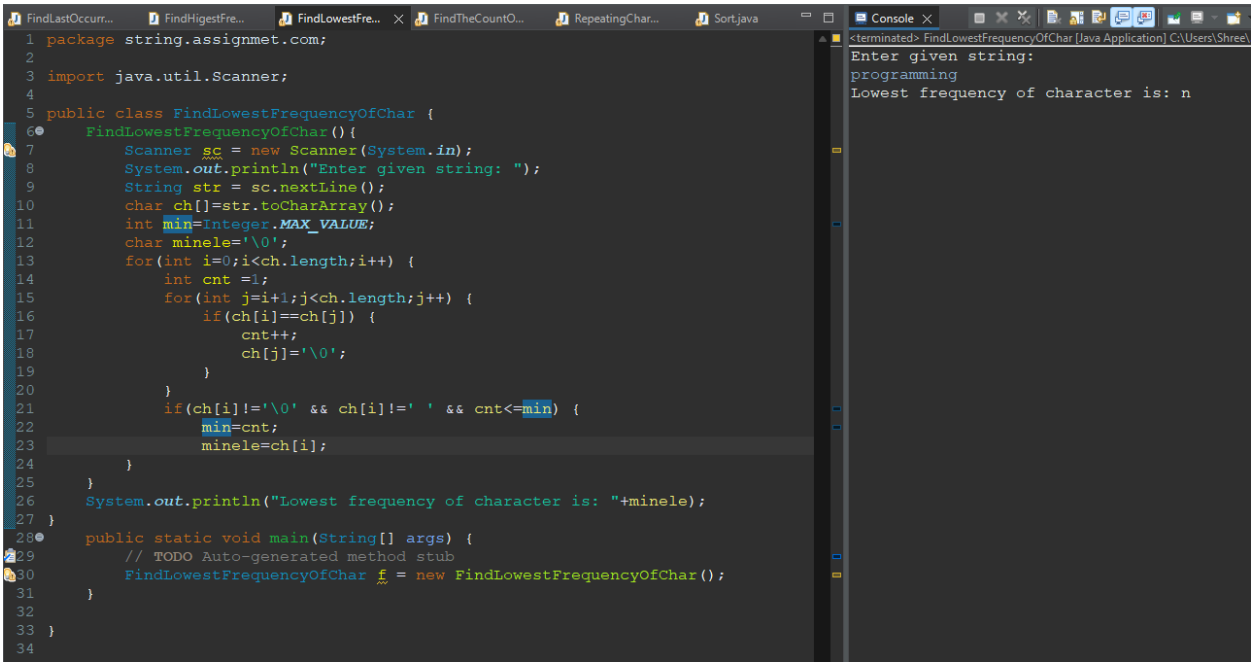
Q2.Write a Java program to find highest frequency character in a string.



```java
package string.assignmet.com;

import java.util.Arrays;
import java.util.Scanner;

public class FindHigestFrequencyChracter {

    public void higestFrequencyChar(String s,Scanner sc) {
        char c[]=s.toCharArray();
        Arrays.sort(c);
        int max=0;
        char maxele='\0';
        for(int i=0;i<c.length;i++) {
            int cnt=1;
            for(int j=i+1;j<c.length;j++) {
                if(c[i]==c[j] && c[i]!='\0') {
                    cnt++;
                    c[j]='\0';
                }
            }
            if(c[i]!='\0' && c[i]!=' ' && cnt>=max) {
                max=cnt;
                maxele=c[i];
            }
        }
        System.out.println("Highest frequency of character is: "+maxele);
    }
    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter given string: ");
        String s = sc.nextLine();
        FindHigestFrequencyChracter f = new FindHigestFrequencyChracter();
        f.higestFrequencyChar(s,sc);
    }

}
```

```
Enter given string:
java is simple language
Highest frequency of character is: a
```

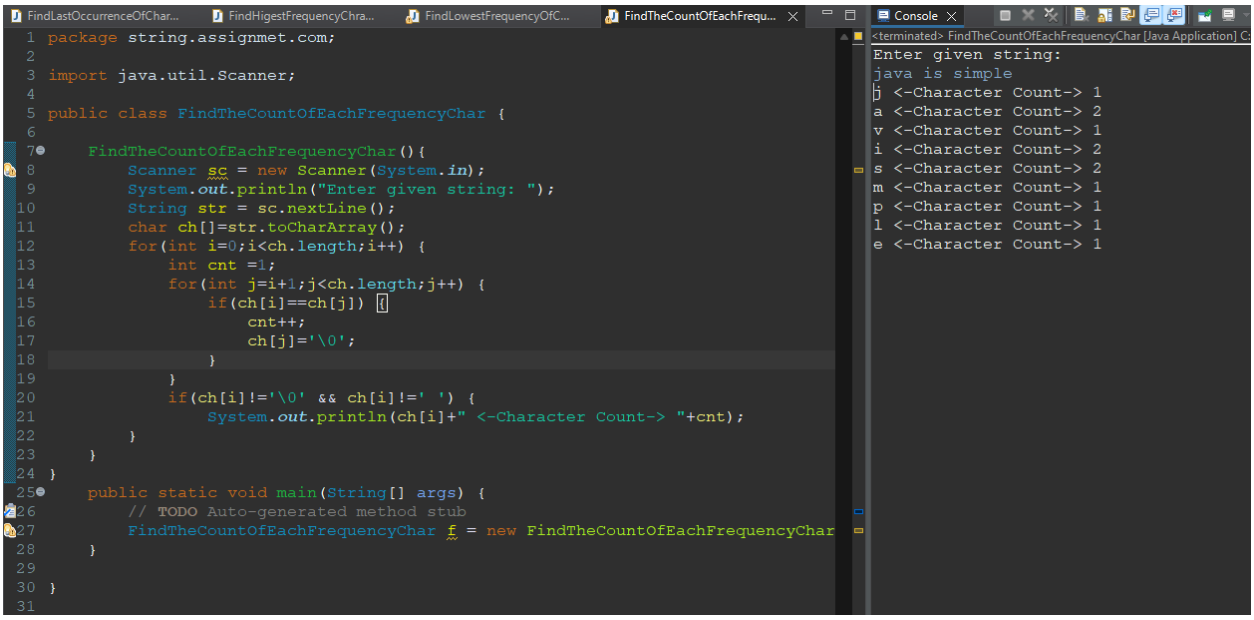
Q3.Write a Java program to find lowest frequency character in a string.



```java
package string.assignmet.com;

import java.util.Scanner;

public class FindLowestFrequencyOfChar {
    FindLowestFrequencyOfChar(){
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter given string: ");
        String str = sc.nextLine();
        char ch[]=str.toCharArray();
        int min=Integer.MAX_VALUE;
        char minele='\0';
        for(int i=0;i<ch.length;i++) {
            int cnt =1;
            for(int j=i+1;j<ch.length;j++) {
                if(ch[i]==ch[j]) {
                    cnt++;
                    ch[j]='\0';
                }
            }
            if(ch[i]!='\0' && ch[i]!=' ' && cnt<=min) {
                min=cnt;
                minele=ch[i];
        }
    }
    System.out.println("Lowest frequency of character is: "+minele);
}
    public static void main(String[] args) {
        // TODO Auto-generated method stub
        FindLowestFrequencyOfChar f = new FindLowestFrequencyOfChar();
    }

}
```

```
Enter given string:
programming
Lowest frequency of character is: n
```

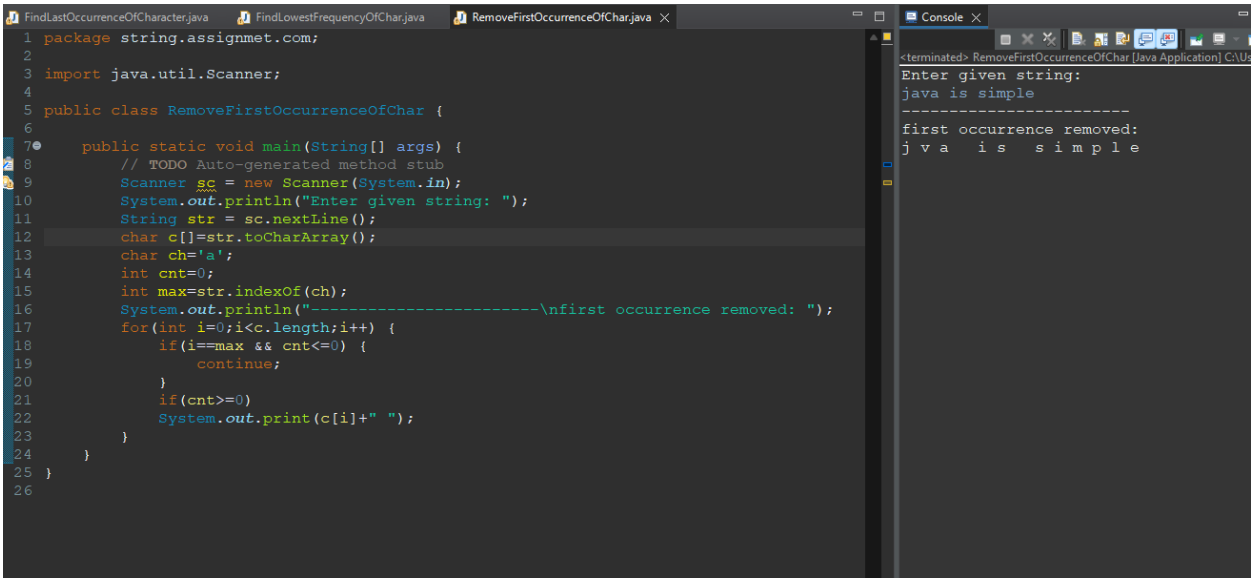
Q4.Write a Java program to count frequency of each character in a string.



```java
package string.assignmet.com;

import java.util.Scanner;

public class FindTheCountOfEachFrequencyChar {

    FindTheCountOfEachFrequencyChar(){
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter given string: ");
        String str = sc.nextLine();
        char ch[]=str.toCharArray();
        for(int i=0;i<ch.length;i++) {
            int cnt =1;
            for(int j=i+1;j<ch.length;j++) {
                if(ch[i]==ch[j]) {
                    cnt++;
                    ch[j]='\0';
                }
            }
            if(ch[i]!='\0' && ch[i]!=' ') {
                System.out.println(ch[i]+" <-Character Count-> "+cnt);
            }
        }
    }
    public static void main(String[] args) {
        // TODO Auto-generated method stub
        FindTheCountOfEachFrequencyChar f = new FindTheCountOfEachFrequencyChar
    }

}
```

```
Enter given string:
java is simple
j <-Character Count-> 1
a <-Character Count-> 2
v <-Character Count-> 1
i <-Character Count-> 2
s <-Character Count-> 2
m <-Character Count-> 1
p <-Character Count-> 1
l <-Character Count-> 1
e <-Character Count-> 1
```

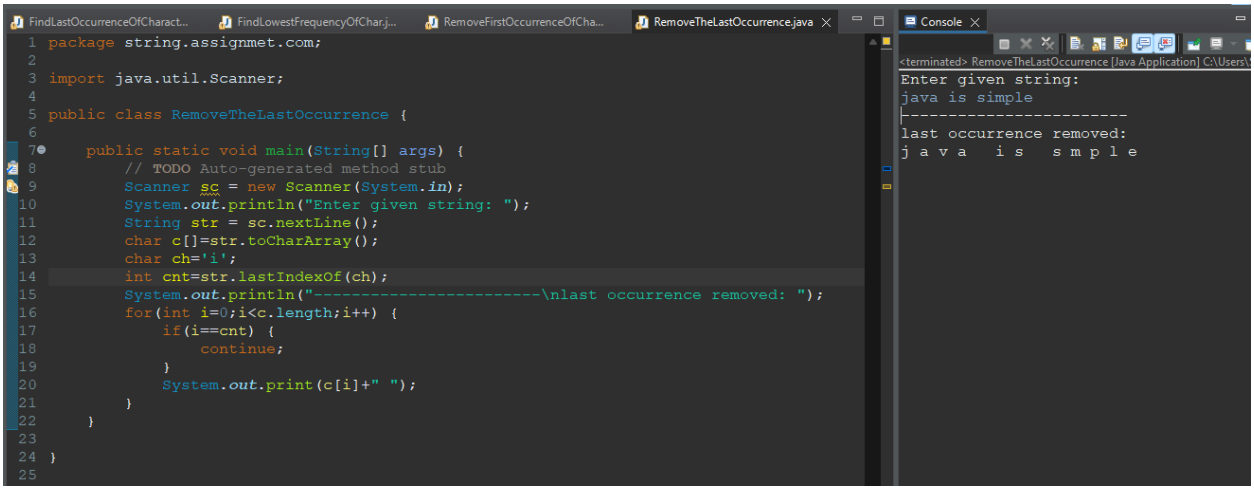
Q5.Write a Java program to remove first occurrence of a character from string.



```
package string.assignmet.com;

import java.util.Scanner;

public class RemoveFirstOccurrenceOfChar {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter given string: ");
        String str = sc.nextLine();
        char c[]=str.toCharArray();
        char ch='a';
        int cnt=0;
        int max=str.indexOf(ch);
        System.out.println("------------------------\nfirst occurrence removed: ");
        for(int i=0;i<c.length;i++) {
            if(i==max && cnt<=0) {
                continue;
            }
            if(cnt>=0)
            System.out.print(c[i]+" ");
        }
    }
}
```

```
Enter given string:
java is simple
------------------------
first occurrence removed:
j v a   i s   s i m p l e
```

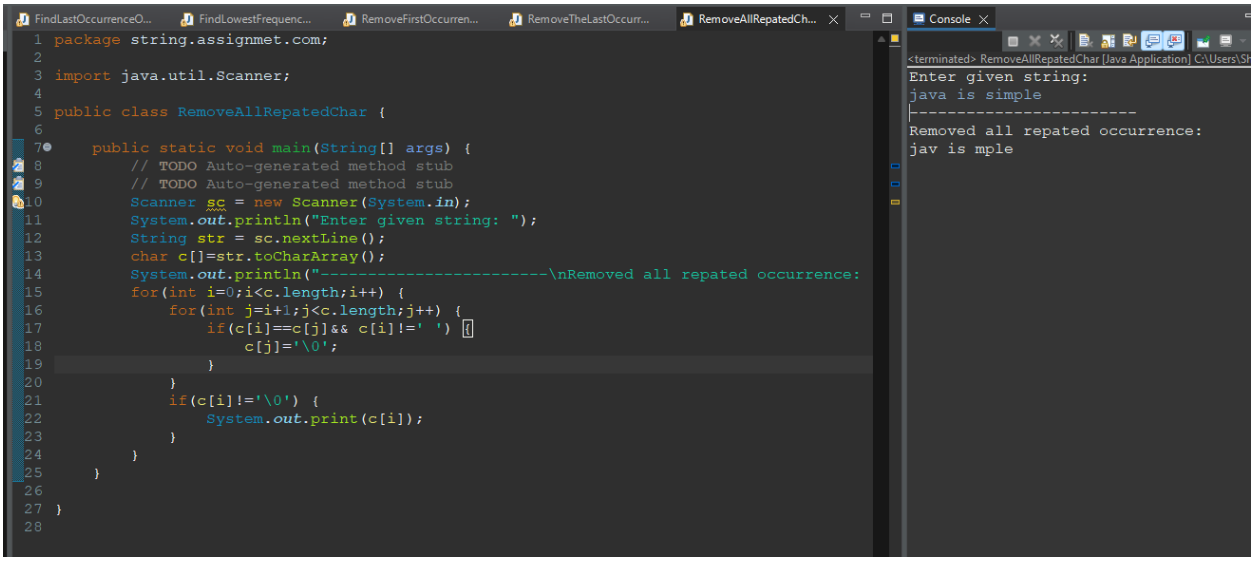
Q6.Write a Java program to remove last occurrence of a character from string.



```
package string.assignmet.com;

import java.util.Scanner;

public class RemoveTheLastOccurrence {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter given string: ");
        String str = sc.nextLine();
        char c[]=str.toCharArray();
        char ch='i';
        int cnt=str.lastIndexOf(ch);
        System.out.println("------------------------\nlast occurrence removed: ");
        for(int i=0;i<c.length;i++) {
            if(i==cnt) {
                continue;
            }
            System.out.print(c[i]+" ");
        }
    }

}
```

```
Enter given string:
java is simple
------------------------
last occurrence removed:
j a v a   i s   s m p l e
```

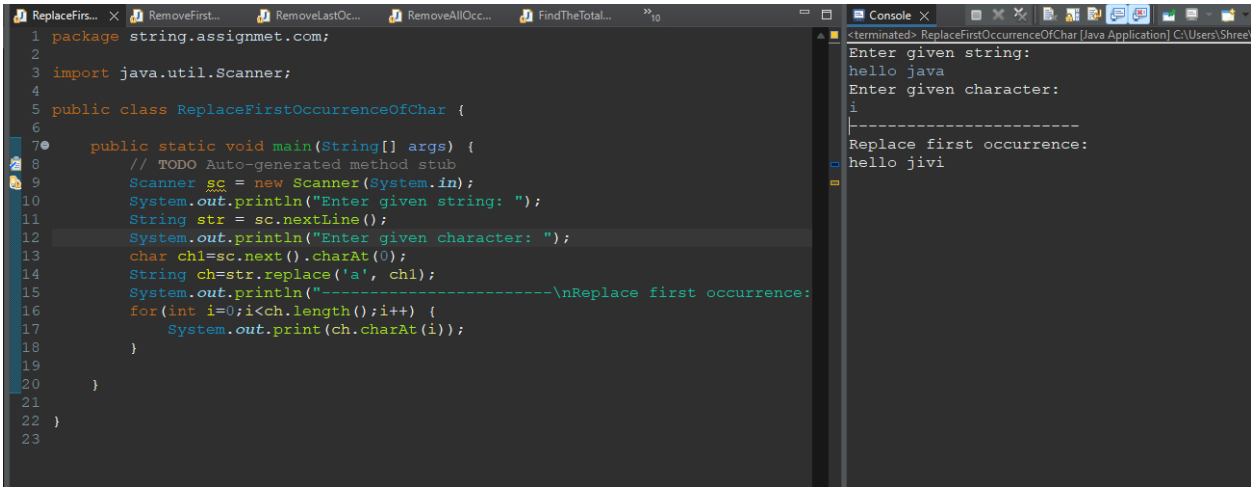
Q7.Write a Java program to remove all repeated characters from a given string.



```
package string.assignmet.com;

import java.util.Scanner;

public class RemoveAllRepatedChar {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        // TODO Auto-generated method stub
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter given string: ");
        String str = sc.nextLine();
        char c[]=str.toCharArray();
        System.out.println("------------------------\nRemoved all repated occurrence:
        for(int i=0;i<c.length;i++) {
            for(int j=i+1;j<c.length;j++) {
                if(c[i]==c[j]&& c[i]!=' ') {
                    c[j]='\0';
                }
            }
            if(c[i]!='\0') {
                System.out.print(c[i]);
            }
        }
    }

}
```

```
Enter given string:
java is simple
------------------------
Removed all repated occurrence:
jav is mple
```

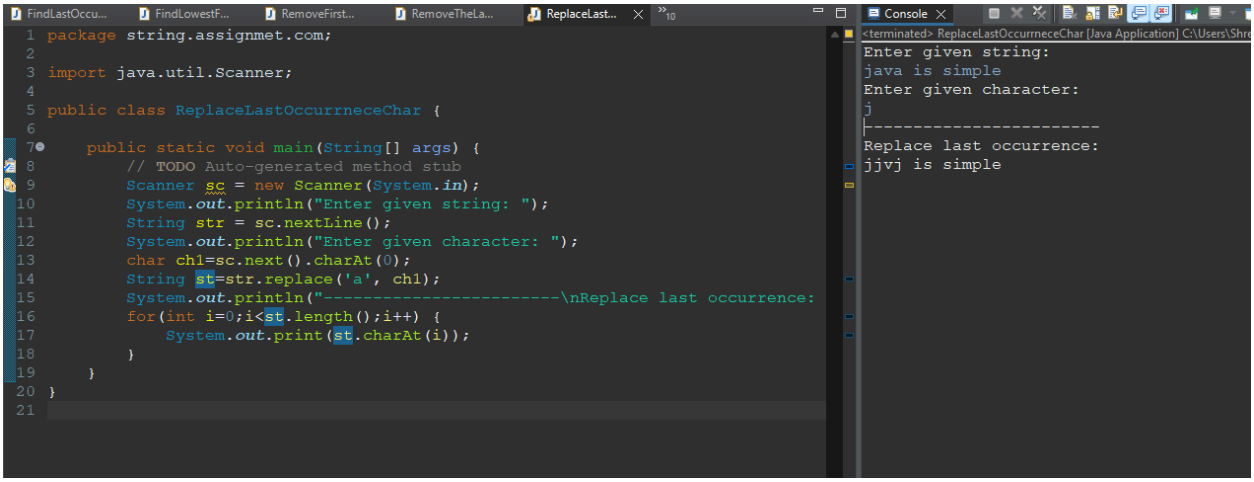
Q8.Write a Java program to replace first occurrence of a character with another in a string.



```
package string.assignmet.com;

import java.util.Scanner;

public class ReplaceFirstOccurrenceOfChar {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter given string: ");
        String str = sc.nextLine();
        System.out.println("Enter given character: ");
        char ch1=sc.next().charAt(0);
        String ch=str.replace('a', ch1);
        System.out.println("------------------------\nReplace first occurrence:
        for(int i=0;i<ch.length();i++) {
            System.out.print(ch.charAt(i));
        }

    }

}
```

```
Enter given string:
hello java
Enter given character:
i
------------------------
Replace first occurrence:
hello jivi
```

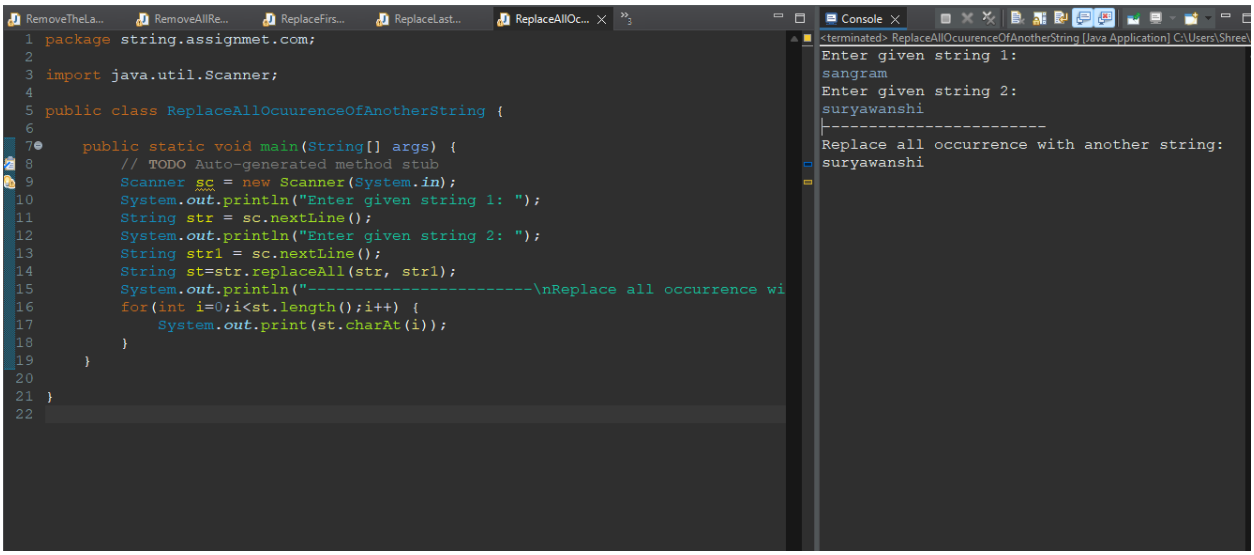
Q9.Write a Java program to replace last occurrence of a character with another in a string.



```
package string.assignmet.com;

import java.util.Scanner;

public class ReplaceLastOccurrneceChar {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter given string: ");
        String str = sc.nextLine();
        System.out.println("Enter given character: ");
        char ch1=sc.next().charAt(0);
        String st=str.replace('a', ch1);
        System.out.println("------------------------\nReplace last occurrence:
        for(int i=0;i<st.length();i++) {
            System.out.print(st.charAt(i));
        }
    }
}
```

```
Enter given string:
java is simple
Enter given character:
j
------------------------
Replace last occurrence:
jjvj is simple
```

Q10.Write a Java program to replace all occurrences of a character with another in a string.



```
package string.assignmet.com;

import java.util.Scanner;

public class ReplaceAllOcuurenceOfAnotherString {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter given string 1: ");
        String str = sc.nextLine();
        System.out.println("Enter given string 2: ");
        String str1 = sc.nextLine();
        String st=str.replaceAll(str, str1);
        System.out.println("------------------------\nReplace all occurrence wi
        for(int i=0;i<st.length();i++) {
            System.out.print(st.charAt(i));
        }
    }

}
```

```
Enter given string 1:
sangram
Enter given string 2:
suryawanshi
------------------------
Replace all occurrence with another string:
suryawanshi
```

Q11.Write a Java program to find last occurrence of a word in a given string.

```java
package string.assignmet.com;

import java.util.Scanner;

public class FindLastOccurrenceOfGivenWord {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter given string : ");
        String str = sc.nextLine();
        String s[] = str.split(" ");
        int c=0;
        for(int i=0;i<s.length;i++) {
            if(s[s.length-1].equals(s[i])) {
                c++;
            }
        }
        System.out.println("Last occurrence of given word: " +c);
    }

}
```

```
Enter given string :
java is java is java
Last occurrence of given word: 3
```

Q12.Write a Java program to search all occurrences of a word in given string.

```java
package string.assignmet.com;

import java.util.Scanner;

public class SerachAllOccurrenceOfWord {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter given string : ");
        String str = sc.nextLine();
        String s1[]=str.split(" ");
        String s="java";
        int c=0;
        for(int i=0;i<s1.length;i++) {
            if(s1[i].equals(s)){
                c++;
            }
        }
        System.out.println("given word all occurence: "+c);
    }
}
```

```
Enter given string :
java is simple java is robust
given word all occurence: 2
```

Q13.Write a Java program to count occurrences of a word in a given string.

```java
package string.assignmet.com;

import java.util.Scanner;

public class FindCountOccurenceOfGivenWord {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter given string : ");
        String str = sc.nextLine();
        String s1[]=str.split(" ");
        String s="java";
        int c=0;
        for(int i=0;i<s1.length;i++) {
            if(s1[i].equals(s)){
                c++;
            }
        }
        System.out.println("given word occurence: "+c);
    }

}
```

```
Enter given string :
java is simple java is robust
given word occurence: 2
```

Q14.Write a Java program to remove first occurrence of a word from string.

```java
package string.assignmet.com;

import java.util.Scanner;

public class RemoveFirstOccurrenceWord {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter given string : ");
        String str = sc.nextLine();
        String s[]=str.split(" ");
        int cnt=0;
        for(int i=0;i<s.length;i++) {
            if(s[0].equals(s[i]) && cnt>0) {
                continue;
            }
            cnt++;
            System.out.print(s[i]+" ");
        }
    }

}
```

```
Enter given string :
java is simple java is robust
java is simple is robust
```

Q15.Write a Java program to remove last occurrence of a word in given string.

```java
package string.assignmet.com;

import java.util.Scanner;

public class RemoveLastOccurrenceOfword {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter given string : ");
        String str = sc.nextLine();
        String s[]=str.split(" ");
        int x=str.lastIndexOf(str);
        for(int i=0;i<s.length;i++) {
            if(i==x) {
                continue;
            }
            System.out.print(s[i]+" ");
        }
    }

}
```

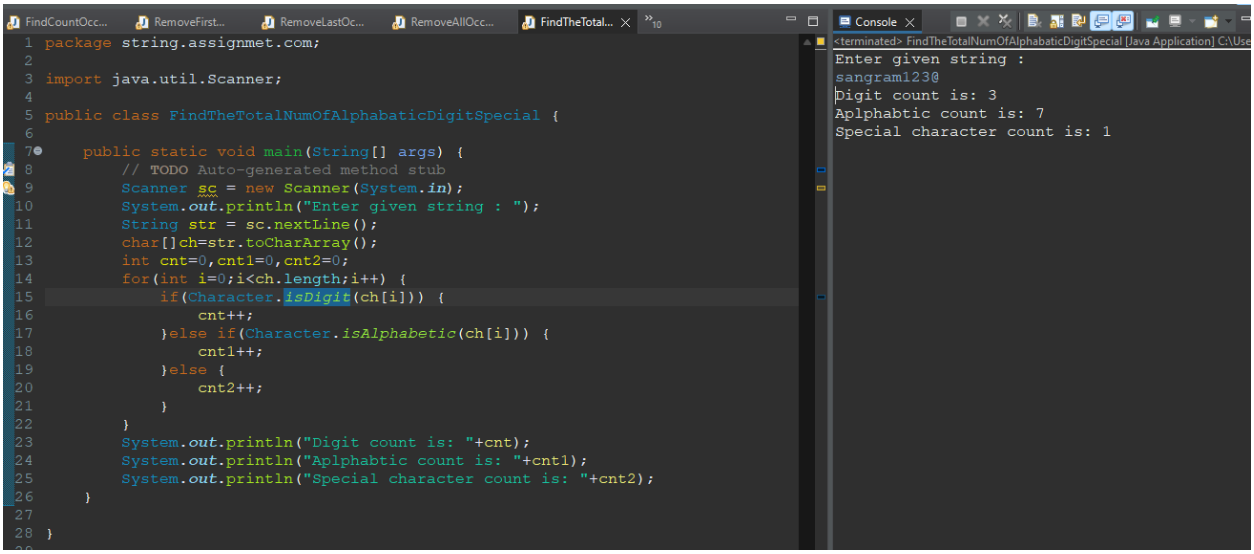
```
Enter given string :
java is simple java
is simple java
```

Q16.Write a Java program to remove all occurrence of a word in given string.

```java
package string.assignmet.com;

import java.util.Scanner;

public class RemoveAllOccurenceOfWord {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter given string : ");
        String str = sc.nextLine();
        String s[]=str.split("java");
        String s1="Java";
        int c=0;
        for(int i=0;i<s.length;i++) {
            if(s[i]==s1) {
                c++;
            }
            System.out.print(s[i]+" ");
        }

    }

}
```

```
Enter given string :
java is simple java is robust
  is simple   is robust
```

Q17.Write a Java program to find total number of alphabets, digits or special character in a string.




```java
package string.assignmet.com;

import java.util.Scanner;

public class FindTheTotalNumOfAlphabaticDigitSpecial {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter given string : ");
        String str = sc.nextLine();
        char[]ch=str.toCharArray();
        int cnt=0,cnt1=0,cnt2=0;
        for(int i=0;i<ch.length;i++) {
            if(Character.isDigit(ch[i])) {
                cnt++;
            }else if(Character.isAlphabetic(ch[i])) {
                cnt1++;
            }else {
                cnt2++;
            }
        }
        System.out.println("Digit count is: "+cnt);
        System.out.println("Aplphabtic count is: "+cnt1);
        System.out.println("Special character count is: "+cnt2);
    }

}
```