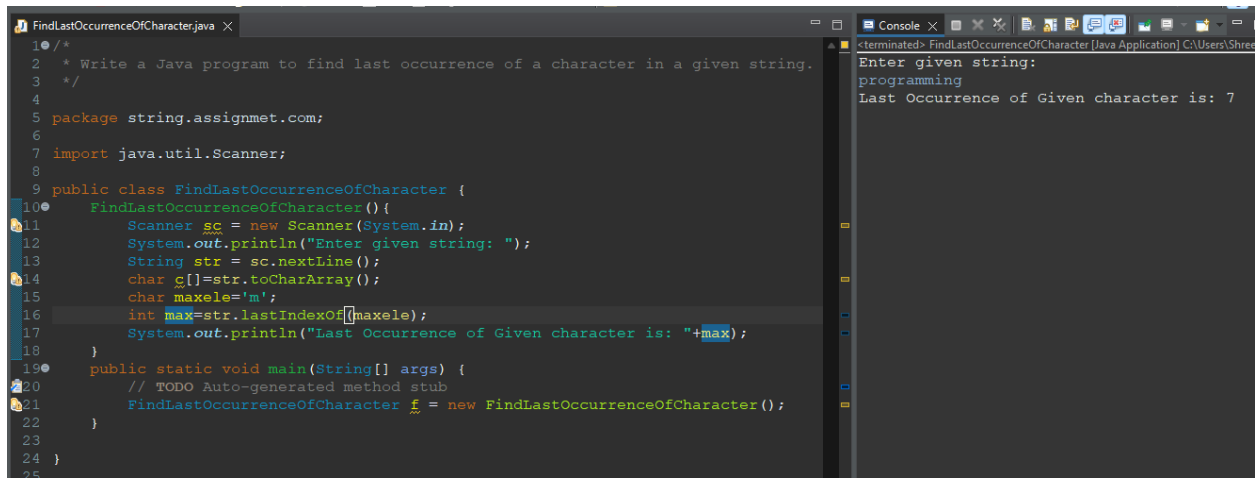


## Assignment No:-30

Name:-Suryawanshi Sangramsingh Sambhaji

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.**

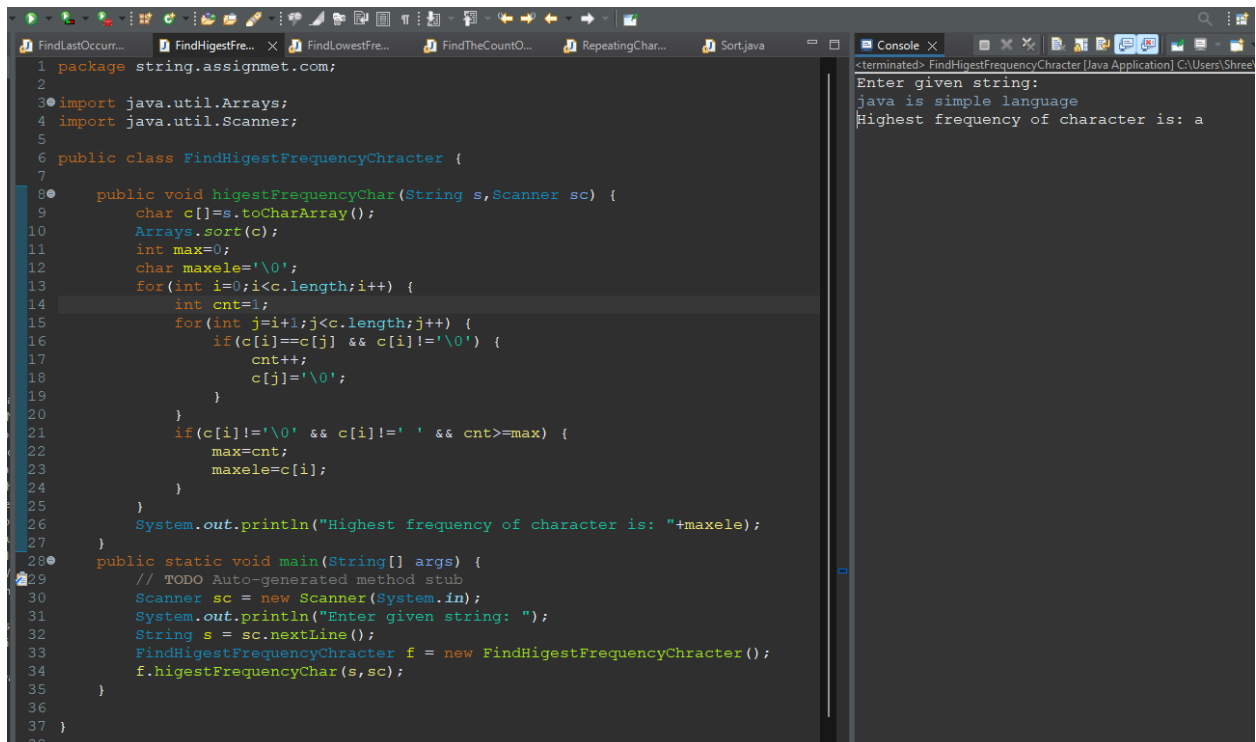


```
1 10 /*
2  * Write a Java program to find last occurrence of a character in a given string.
3  */
4
5 package string.assignmet.com;
6
7 import java.util.Scanner;
8
9 public class FindLastOccurrenceOfCharacter {
10     FindLastOccurrenceOfCharacter() {
11         Scanner sc = new Scanner(System.in);
12         System.out.println("Enter given string: ");
13         String str = sc.nextLine();
14         char c[] = str.toCharArray();
15         char maxele = 'm';
16         int max = str.lastIndexOf(maxele);
17         System.out.println("Last Occurrence of Given character is: " + max);
18     }
19     public static void main(String[] args) {
20         // TODO Auto-generated method stub
21         FindLastOccurrenceOfCharacter f = new FindLastOccurrenceOfCharacter();
22     }
23
24 }
25
```

Console Output:

```
<terminated> FindLastOccurrenceOfCharacter [Java Application] C:\Users\Shree
Enter given string:
programming
Last Occurrence of Given character is: 7
```

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

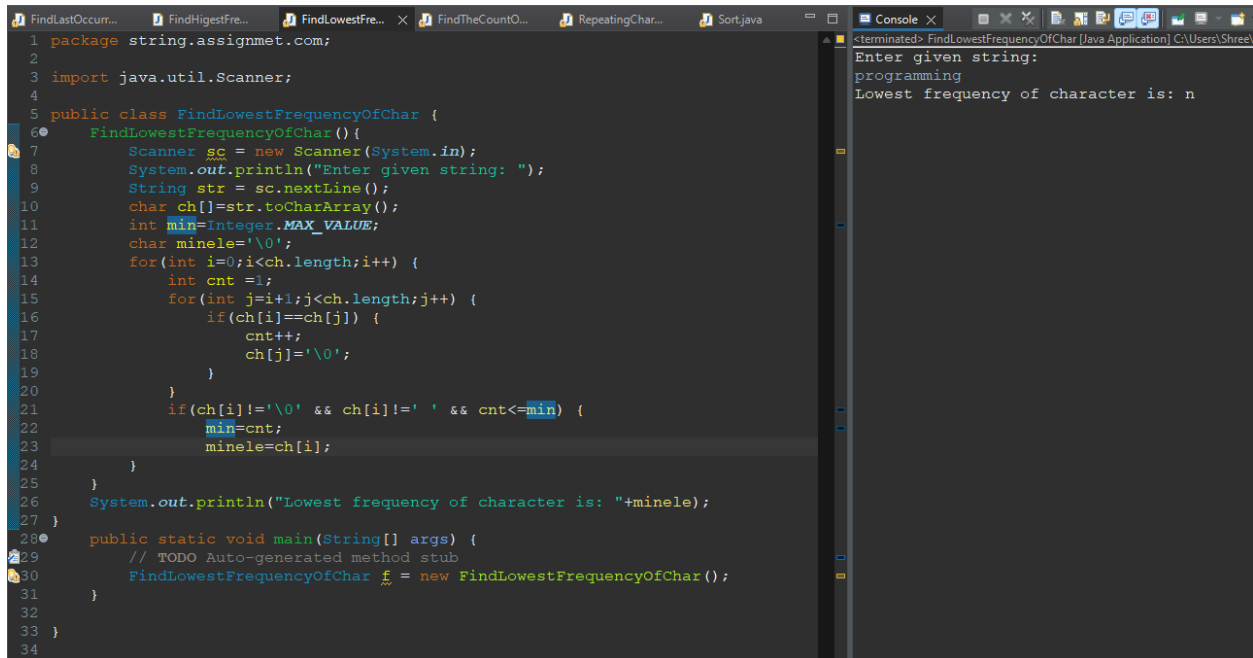


```
1 package string.assignmet.com;
2
3 import java.util.Arrays;
4 import java.util.Scanner;
5
6 public class FindHigestFrequencyChracter {
7
8     public void higestFrequencyChar(String s, Scanner sc) {
9         char c[] = s.toCharArray();
10        Arrays.sort(c);
11        int max = 0;
12        char maxele = '\0';
13        for(int i = 0; i < c.length; i++) {
14            int cnt = 1;
15            for(int j = i + 1; j < c.length; j++) {
16                if(c[i] == c[j] && c[i] != '\0') {
17                    cnt++;
18                    c[j] = '\0';
19                }
20            }
21            if(c[i] != '\0' && c[i] != ' ' && cnt >= max) {
22                max = cnt;
23                maxele = c[i];
24            }
25        }
26        System.out.println("Highest frequency of character is: " + maxele);
27    }
28    public static void main(String[] args) {
29        // TODO Auto-generated method stub
30        Scanner sc = new Scanner(System.in);
31        System.out.println("Enter given string: ");
32        String s = sc.nextLine();
33        FindHigestFrequencyChracter f = new FindHigestFrequencyChracter();
34        f.higestFrequencyChar(s, sc);
35    }
36
37 }
38
```

Console Output:

```
<terminated> FindHigestFrequencyChracter [Java Application] C:\Users\Shree
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.**

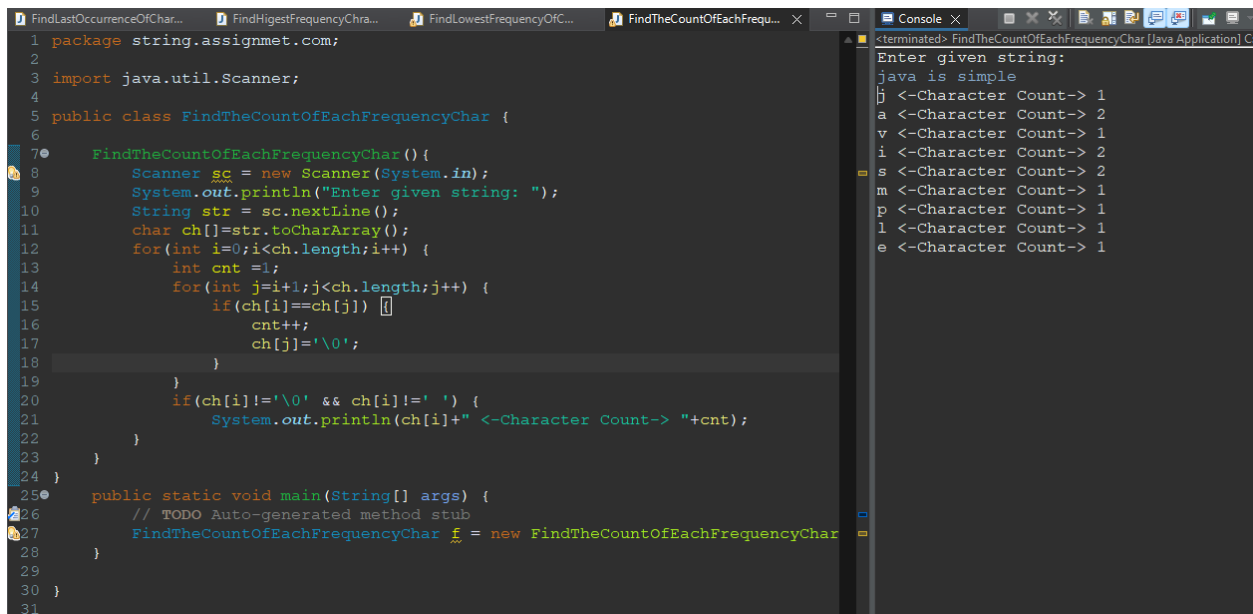


```
1 package string.assignmet.com;
2
3 import java.util.Scanner;
4
5 public class FindLowestFrequencyOfChar {
6     FindLowestFrequencyOfChar() {
7         Scanner gc = new Scanner(System.in);
8         System.out.println("Enter given string: ");
9         String str = gc.nextLine();
10        char ch[] = str.toCharArray();
11        int min = Integer.MAX_VALUE;
12        char minele = '\0';
13        for (int i = 0; i < ch.length; i++) {
14            int cnt = 1;
15            for (int j = i + 1; j < ch.length; j++) {
16                if (ch[i] == ch[j]) {
17                    cnt++;
18                    ch[j] = '\0';
19                }
20            }
21            if (ch[i] != '\0' && ch[i] != ' ' && cnt <= min) {
22                min = cnt;
23                minele = ch[i];
24            }
25        }
26        System.out.println("Lowest frequency of character is: " + minele);
27    }
28
29    public static void main(String[] args) {
30        // TODO Auto-generated method stub
31        FindLowestFrequencyOfChar f = new FindLowestFrequencyOfChar();
32    }
33 }
34
```

Console Output:

```
<terminated> FindLowestFrequencyOfChar [Java Application] C:\Users\Shree\
Enter given string:
programming
Lowest frequency of character is: n
```

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

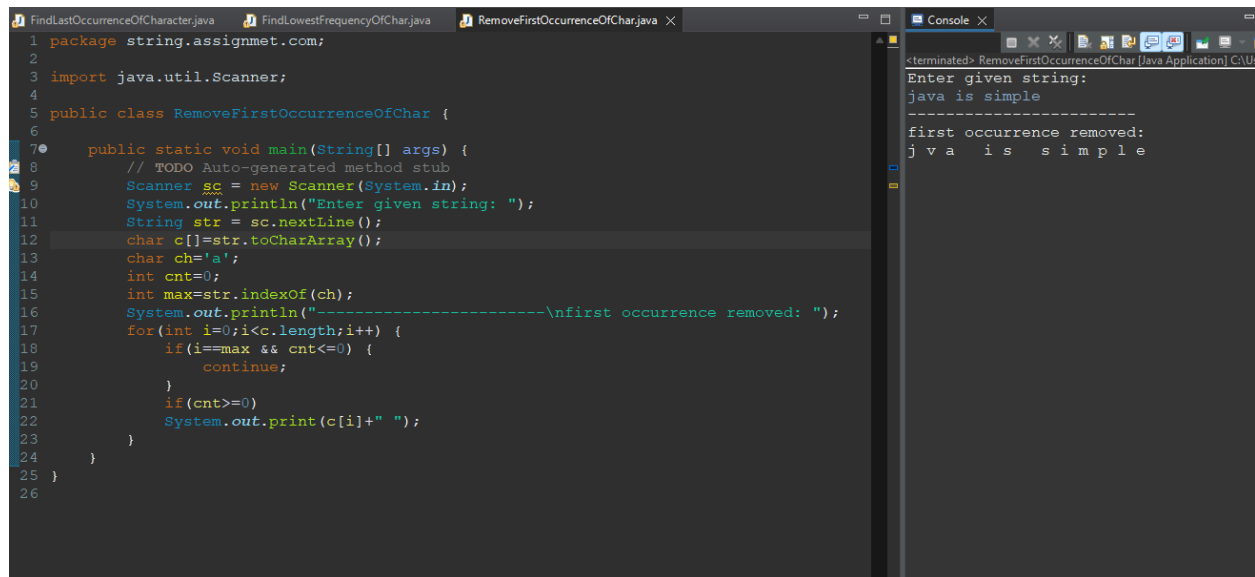


```
1 package string.assignmet.com;
2
3 import java.util.Scanner;
4
5 public class FindTheCountOfEachFrequencyChar {
6
7     FindTheCountOfEachFrequencyChar() {
8         Scanner gc = new Scanner(System.in);
9         System.out.println("Enter given string: ");
10        String str = gc.nextLine();
11        char ch[] = str.toCharArray();
12        for (int i = 0; i < ch.length; i++) {
13            int cnt = 1;
14            for (int j = i + 1; j < ch.length; j++) {
15                if (ch[i] == ch[j]) {
16                    cnt++;
17                    ch[j] = '\0';
18                }
19            }
20            if (ch[i] != '\0' && ch[i] != ' ') {
21                System.out.println(ch[i] + " <-Character Count-> " + cnt);
22            }
23        }
24    }
25
26    public static void main(String[] args) {
27        // TODO Auto-generated method stub
28        FindTheCountOfEachFrequencyChar f = new FindTheCountOfEachFrequencyChar();
29    }
30 }
31
```

Console Output:

```
<terminated> FindTheCountOfEachFrequencyChar [Java Application] C
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.**

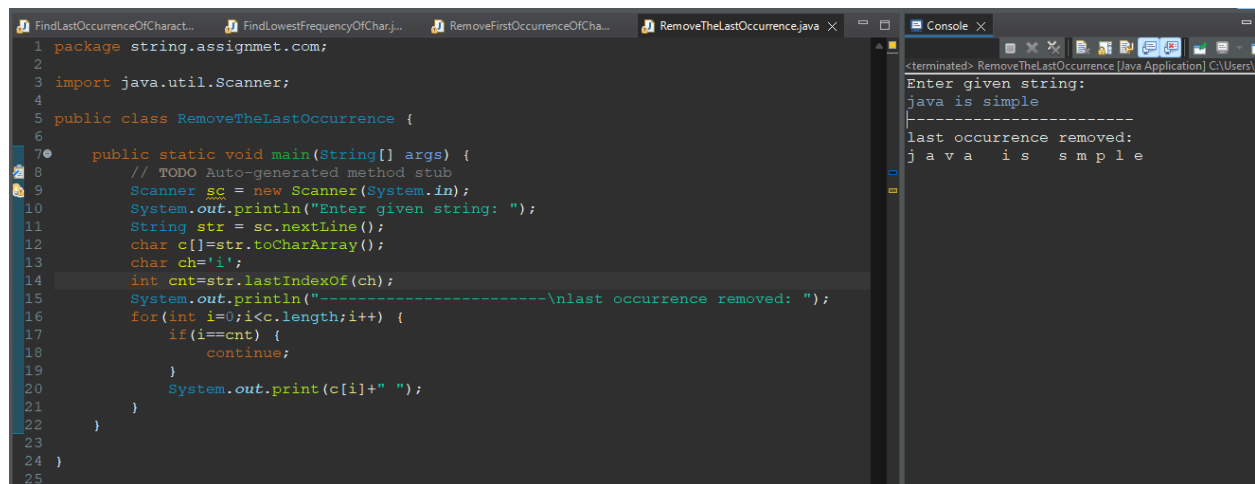


```
1 package string.assignmet.com;
2
3 import java.util.Scanner;
4
5 public class RemoveFirstOccurrenceOfChar {
6
7     public static void main(String[] args) {
8         // TODO Auto-generated method stub
9         Scanner sc = new Scanner(System.in);
10        System.out.println("Enter given string: ");
11        String str = sc.nextLine();
12        char c[]=str.toCharArray();
13        char ch='a';
14        int cnt=0;
15        int max=str.indexOf(ch);
16        System.out.println("-----\nfirst occurrence removed: ");
17        for(int i=0;i<c.length;i++) {
18            if(i==max && cnt<=0) {
19                continue;
20            }
21            if(cnt>=0)
22                System.out.print(c[i]+" ");
23        }
24    }
25 }
26
```

Console Output:

```
<terminated> RemoveFirstOccurrenceOfChar [Java Application] C:\Users\...
Enter given string:
java is simple
-----
first occurrence removed:
jva is simple
```

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

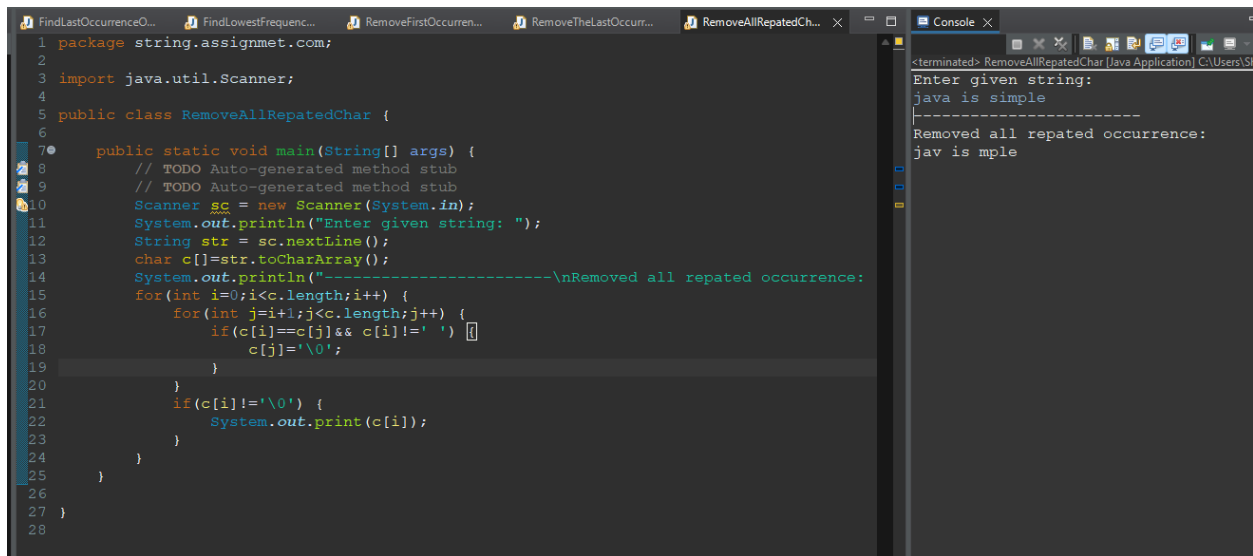


```
1 package string.assignmet.com;
2
3 import java.util.Scanner;
4
5 public class RemoveTheLastOccurrence {
6
7     public static void main(String[] args) {
8         // TODO Auto-generated method stub
9         Scanner sc = new Scanner(System.in);
10        System.out.println("Enter given string: ");
11        String str = sc.nextLine();
12        char c[]=str.toCharArray();
13        char ch='i';
14        int cnt=str.lastIndexOf(ch);
15        System.out.println("-----\nlast occurrence removed: ");
16        for(int i=0;i<c.length;i++) {
17            if(i==cnt) {
18                continue;
19            }
20            System.out.print(c[i]+" ");
21        }
22    }
23 }
24 }
25
```

Console Output:

```
<terminated> RemoveTheLastOccurrence [Java Application] C:\Users\...
Enter given string:
java is simple
-----
last occurrence removed:
java is smple
```

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



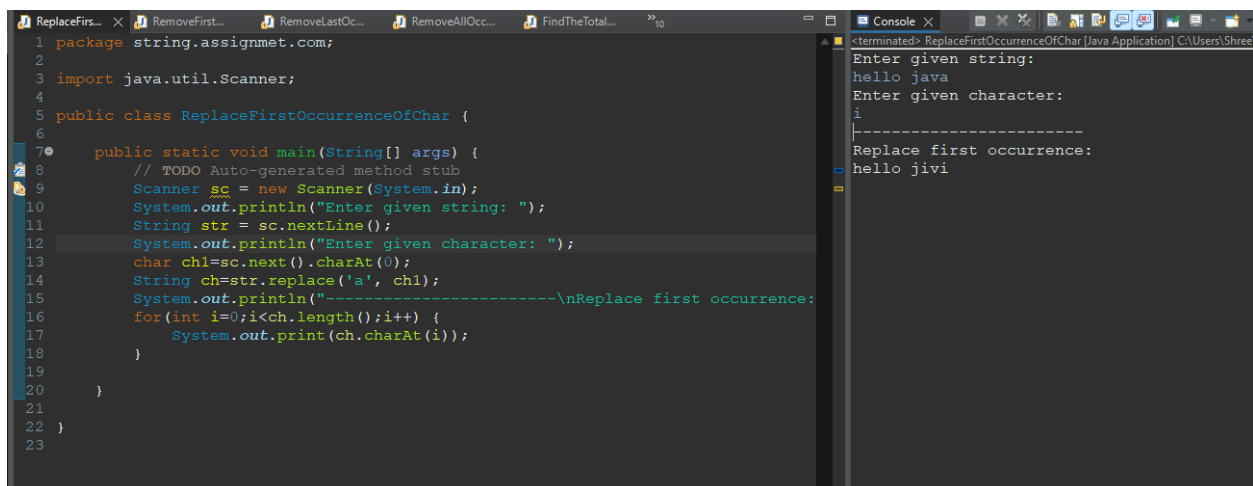
The screenshot shows a Java IDE with a file named 'RemoveAllRepeatedChar.java'. The code is as follows:

```
1 package string.assignmet.com;
2
3 import java.util.Scanner;
4
5 public class RemoveAllRepeatedChar {
6
7     public static void main(String[] args) {
8         // TODO Auto-generated method stub
9         // TODO Auto-generated method stub
10        Scanner sc = new Scanner(System.in);
11        System.out.println("Enter given string: ");
12        String str = sc.nextLine();
13        char c[]=str.toCharArray();
14        System.out.println("-----\nRemoved all repated occurrence:");
15        for(int i=0;i<c.length;i++) {
16            for(int j=i+1;j<c.length;j++) {
17                if(c[i]==c[j] && c[i]!=' ') {
18                    c[j]='\0';
19                }
20            }
21            if(c[i]!='\0') {
22                System.out.print(c[i]);
23            }
24        }
25    }
26 }
27
28
```

The console output shows the program execution:

```
<terminated> RemoveAllRepeatedChar [Java Application] C:\Users\Shree
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.**



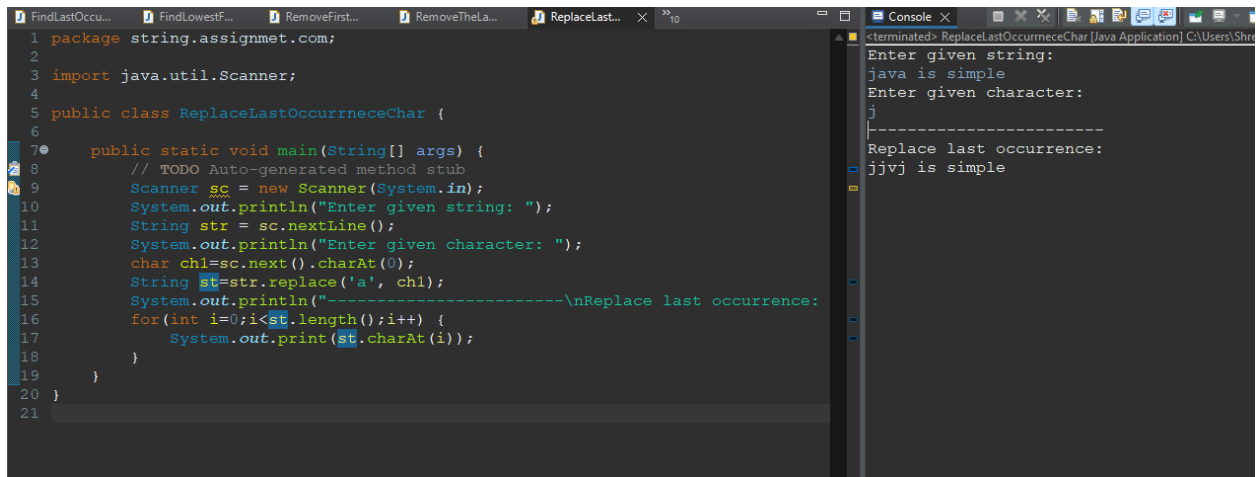
The screenshot shows a Java IDE with a file named 'ReplaceFirstOccurrenceOfChar.java'. The code is as follows:

```
1 package string.assignmet.com;
2
3 import java.util.Scanner;
4
5 public class ReplaceFirstOccurrenceOfChar {
6
7     public static void main(String[] args) {
8         // TODO Auto-generated method stub
9         Scanner sc = new Scanner(System.in);
10        System.out.println("Enter given string: ");
11        String str = sc.nextLine();
12        System.out.println("Enter given character: ");
13        char ch1=sc.next().charAt(0);
14        String ch=str.replace('a', ch1);
15        System.out.println("-----\nReplace first occurrence:");
16        for(int i=0;i<ch.length();i++) {
17            System.out.print(ch.charAt(i));
18        }
19    }
20 }
21
22 }
23
```

The console output shows the program execution:

```
<terminated> ReplaceFirstOccurrenceOfChar [Java Application] C:\Users\Shree
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.**

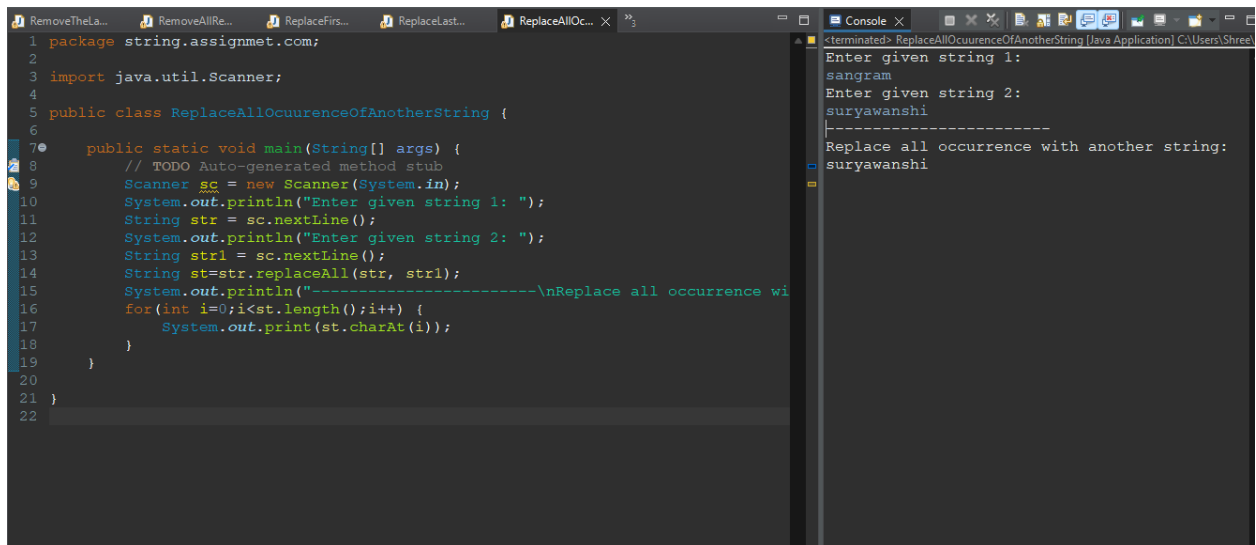


```
1 package string.assignmet.com;
2
3 import java.util.Scanner;
4
5 public class ReplaceLastOccurneceChar {
6
7     public static void main(String[] args) {
8         // TODO Auto-generated method stub
9         Scanner sc = new Scanner(System.in);
10        System.out.println("Enter given string: ");
11        String str = sc.nextLine();
12        System.out.println("Enter given character: ");
13        char chl=sc.next().charAt(0);
14        String st=str.replace('a', chl);
15        System.out.println("-----\nReplace last occurrence:");
16        for(int i=0;i<st.length();i++) {
17            System.out.print(st.charAt(i));
18        }
19    }
20 }
21
```

Console Output:

```
<terminated> ReplaceLastOccurneceChar [Java Application] C:\Users\Shre
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.**



```
1 package string.assignmet.com;
2
3 import java.util.Scanner;
4
5 public class ReplaceAllOccurenceOfAnotherString {
6
7     public static void main(String[] args) {
8         // TODO Auto-generated method stub
9         Scanner sc = new Scanner(System.in);
10        System.out.println("Enter given string 1: ");
11        String str = sc.nextLine();
12        System.out.println("Enter given string 2: ");
13        String str1 = sc.nextLine();
14        String st=str.replaceAll(str, str1);
15        System.out.println("-----\nReplace all occurrence wi");
16        for(int i=0;i<st.length();i++) {
17            System.out.print(st.charAt(i));
18        }
19    }
20 }
21
22
```

Console Output:

```
<terminated> ReplaceAllOccurenceOfAnotherString [Java Application] C:\Users\Shre
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.**

```
1 package string.assignmet.com;
2
3 import java.util.Scanner;
4
5 public class FindLastOccurrenceOfGivenWord {
6
7     public static void main(String[] args) {
8         // TODO Auto-generated method stub
9         Scanner sc = new Scanner(System.in);
10        System.out.println("Enter given string : ");
11        String str = sc.nextLine();
12        String s[] = str.split(" ");
13        int c=0;
14        for(int i=0;i<s.length;i++) {
15            if(s[s.length-1].equals(s[i])) {
16                c++;
17            }
18        }
19        System.out.println("Last occurrence of given word: " +c);
20    }
21 }
22 }
23 }
```

Console output:

```
<terminated> FindLastOccurrenceOfGivenWord [Java Application] C:\Users\Shre...
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.**

```
1 package string.assignmet.com;
2
3 import java.util.Scanner;
4
5 public class SerachAllOccurrenceOfWord {
6
7     public static void main(String[] args) {
8         Scanner sc = new Scanner(System.in);
9         System.out.println("Enter given string : ");
10        String str = sc.nextLine();
11        String s1[]=str.split(" ");
12        String s="java";
13        int c=0;
14        for(int i=0;i<s1.length;i++) {
15            if(s1[i].equals(s)){
16                c++;
17            }
18        }
19        System.out.println("given word all occurence: " +c);
20    }
21 }
```

Console output:

```
<terminated> SerachAllOccurrenceOfWord [Java Application] C:\Users\Shre...
Enter given string :
java is simple java is robust
given word all occurence: 2
```

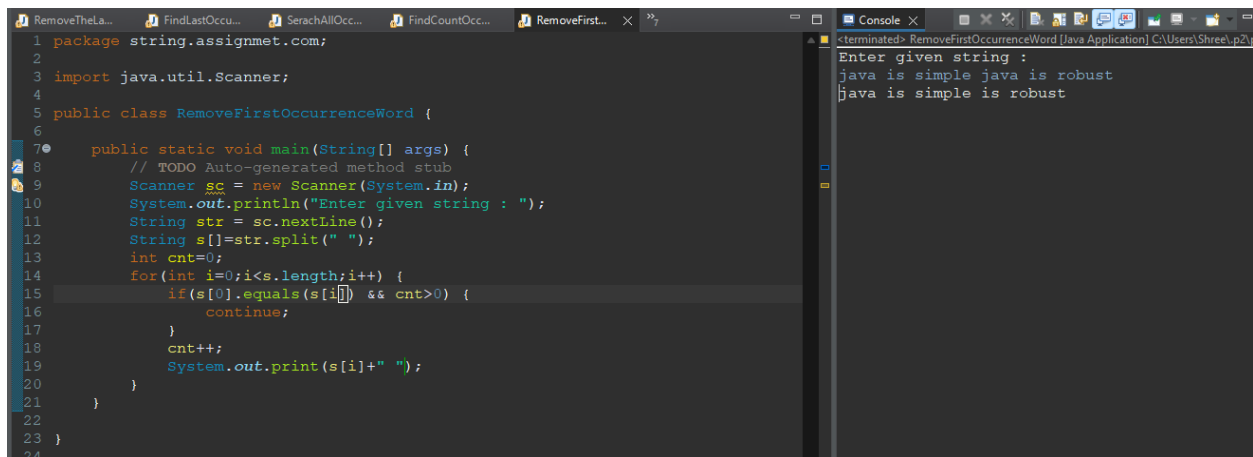
**Q13. Write a Java program to count occurrences of a word in a given string.**

```
1 package string.assignmet.com;
2
3 import java.util.Scanner;
4
5 public class FindCountOccurrenceOfGivenWord {
6
7     public static void main(String[] args) {
8         // TODO Auto-generated method stub
9         Scanner sc = new Scanner(System.in);
10        System.out.println("Enter given string : ");
11        String str = sc.nextLine();
12        String s1[]=str.split(" ");
13        String s="java";
14        int c=0;
15        for(int i=0;i<s1.length;i++) {
16            if(s1[i].equals(s)) {
17                c++;
18            }
19        }
20        System.out.println("given word occurence: " +c);
21    }
22 }
23 }
24 }
```

Console output:

```
<terminated> FindCountOccurrenceOfGivenWord [Java Application] C:\Users\Shre...
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.**

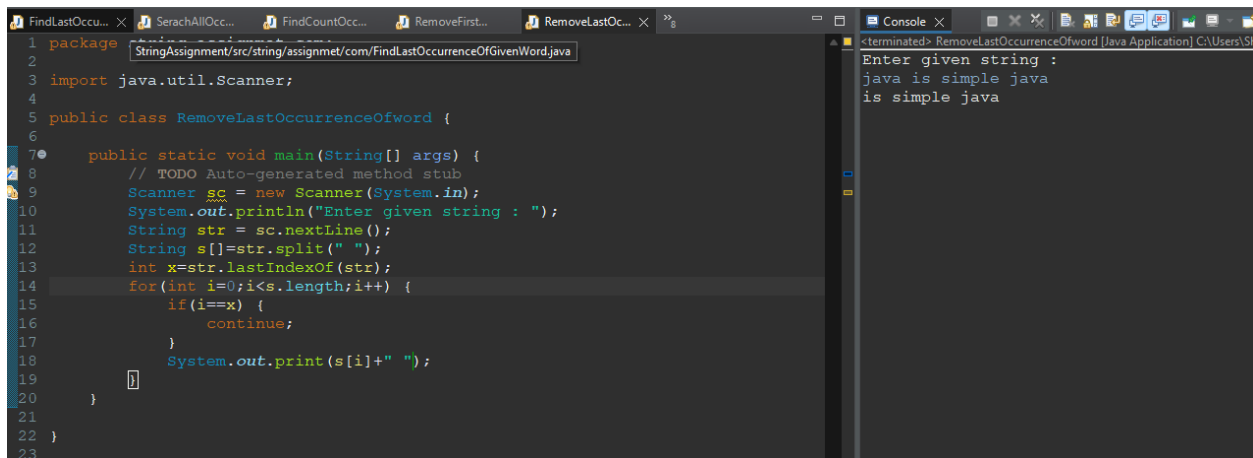


```
1 package string.assignmet.com;
2
3 import java.util.Scanner;
4
5 public class RemoveFirstOccurrenceWord {
6
7     public static void main(String[] args) {
8         // TODO Auto-generated method stub
9         Scanner sc = new Scanner(System.in);
10        System.out.println("Enter given string : ");
11        String str = sc.nextLine();
12        String s[]=str.split(" ");
13        int cnt=0;
14        for(int i=0;i<s.length;i++) {
15            if(s[0].equals(s[i]) && cnt>0) {
16                continue;
17            }
18            cnt++;
19            System.out.print(s[i]+" ");
20        }
21    }
22 }
23
24
```

Console Output:

```
<terminated> RemoveFirstOccurrenceWord [Java Application] C:\Users\Shree\p2p
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.**

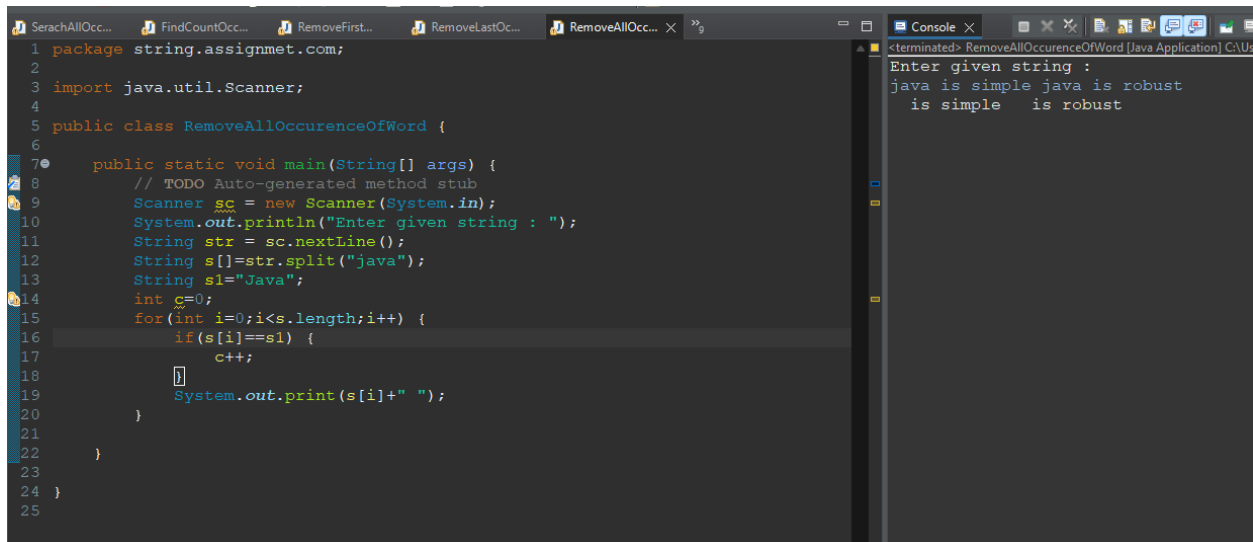


```
1 package string.assignmet.com;
2 import java.util.Scanner;
3
4 public class RemoveLastOccurrenceOfword {
5
6     public static void main(String[] args) {
7         // TODO Auto-generated method stub
8         Scanner sc = new Scanner(System.in);
9         System.out.println("Enter given string : ");
10        String str = sc.nextLine();
11        String s[]=str.split(" ");
12        int x=str.lastIndexOf(str);
13        for(int i=0;i<s.length;i++) {
14            if(i==x) {
15                continue;
16            }
17            System.out.print(s[i]+" ");
18        }
19    }
20 }
21
22
23
```

Console Output:

```
<terminated> RemoveLastOccurrenceOfword [Java Application] C:\Users\SH
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.**



```
1 package string.assignmet.com;
2
3 import java.util.Scanner;
4
5 public class RemoveAllOccurrenceOfWord {
6
7     public static void main(String[] args) {
8         // TODO Auto-generated method stub
9         Scanner sc = new Scanner(System.in);
10        System.out.println("Enter given string : ");
11        String str = sc.nextLine();
12        String s[]=str.split(" ");
13        String s1="java";
14        int c=0;
15        for(int i=0;i<s.length;i++) {
16            if(s[i]==s1) {
17                c++;
18            }
19            System.out.print(s[i]+" ");
20        }
21    }
22 }
23
24
25
```

Console Output:

```
<terminated> RemoveAllOccurrenceOfWord [Java Application] C:\Us
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.**

```
FindCountOcc... RemoveFirst... RemoveLastOcc... RemoveAllOcc... FindTheTotal... × 10
1 package string.assignmet.com;
2
3 import java.util.Scanner;
4
5 public class FindTheTotalNumOfAlphabeticDigitSpecial {
6
7     public static void main(String[] args) {
8         // TODO Auto-generated method stub
9         Scanner sc = new Scanner(System.in);
10        System.out.println("Enter given string : ");
11        String str = sc.nextLine();
12        char[] ch = str.toCharArray();
13        int cnt=0, cnt1=0, cnt2=0;
14        for(int i=0; i<ch.length; i++) {
15            if(Character.isDigit(ch[i])) {
16                cnt++;
17            } else if(Character.isAlphabetic(ch[i])) {
18                cnt1++;
19            } else {
20                cnt2++;
21            }
22        }
23        System.out.println("Digit count is: "+cnt);
24        System.out.println("Alphabetic count is: "+cnt1);
25        System.out.println("Special character count is: "+cnt2);
26    }
27
28 }
```

Console ×

<terminated> FindTheTotalNumOfAlphabeticDigitSpecial [Java Application] C:\Use  
Enter given string :  
sangram123@  
Digit count is: 3  
Alphabetic count is: 7  
Special character count is: 1