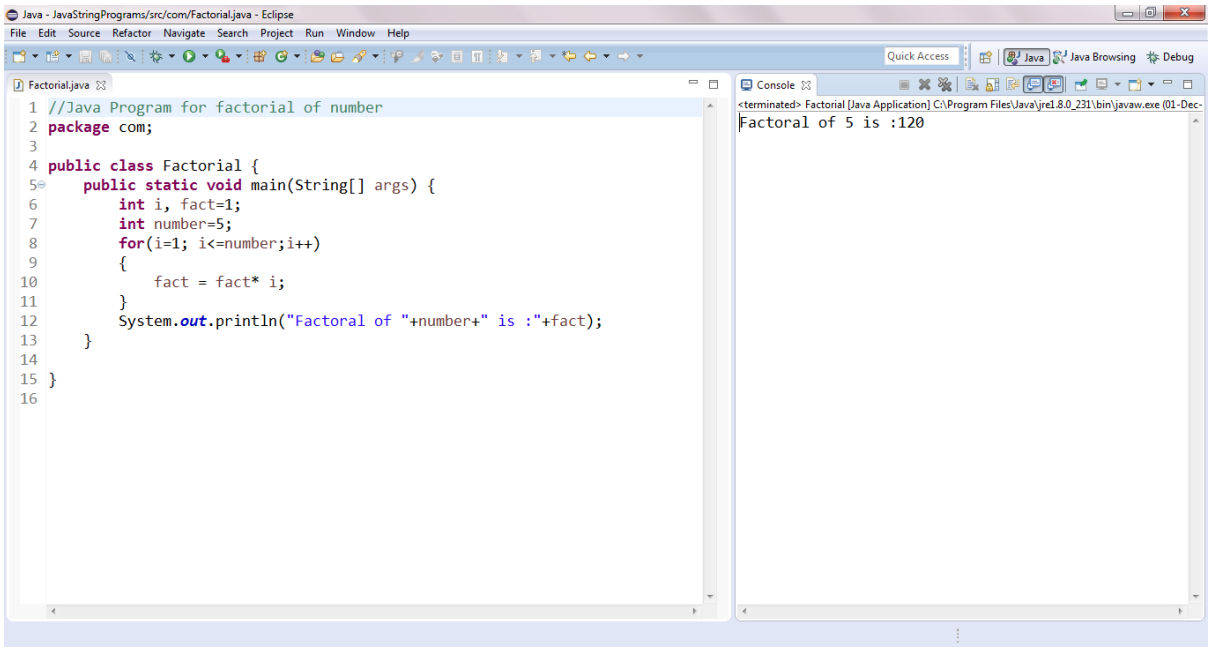
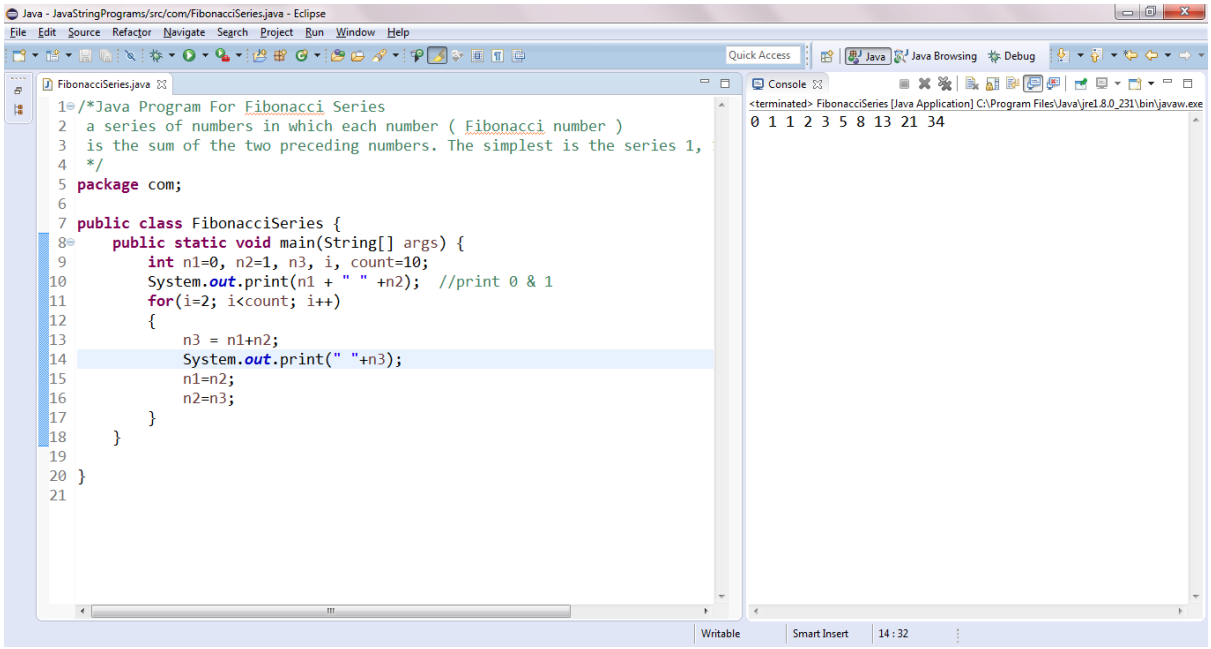
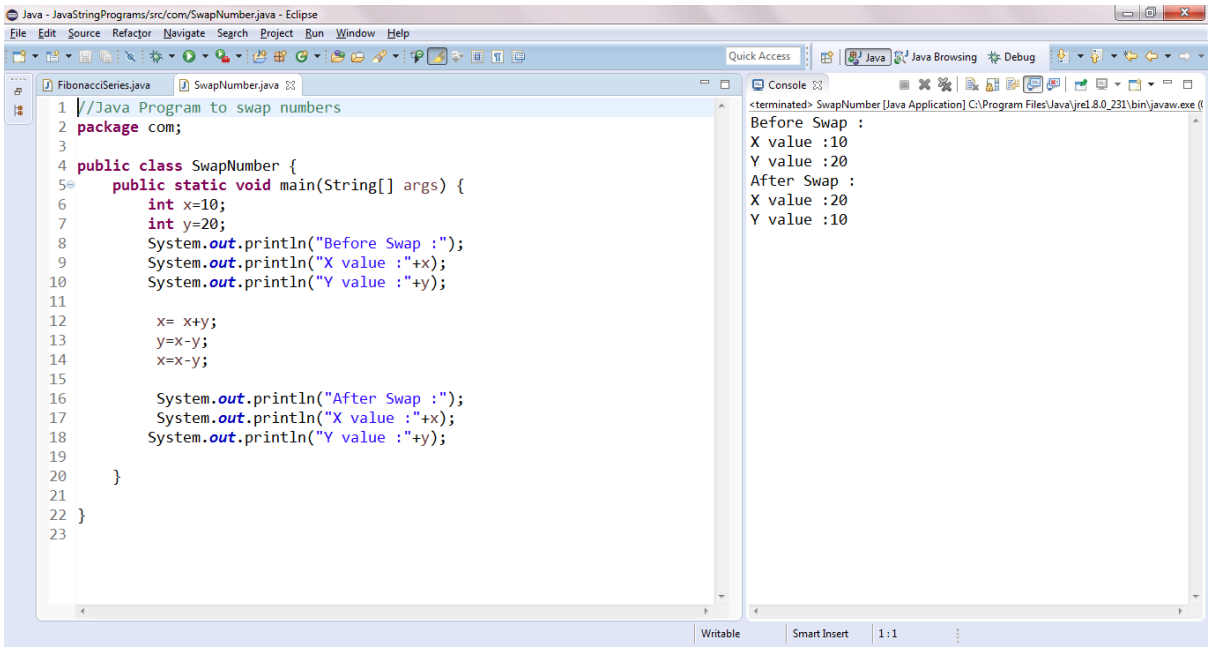
1) Factorial No



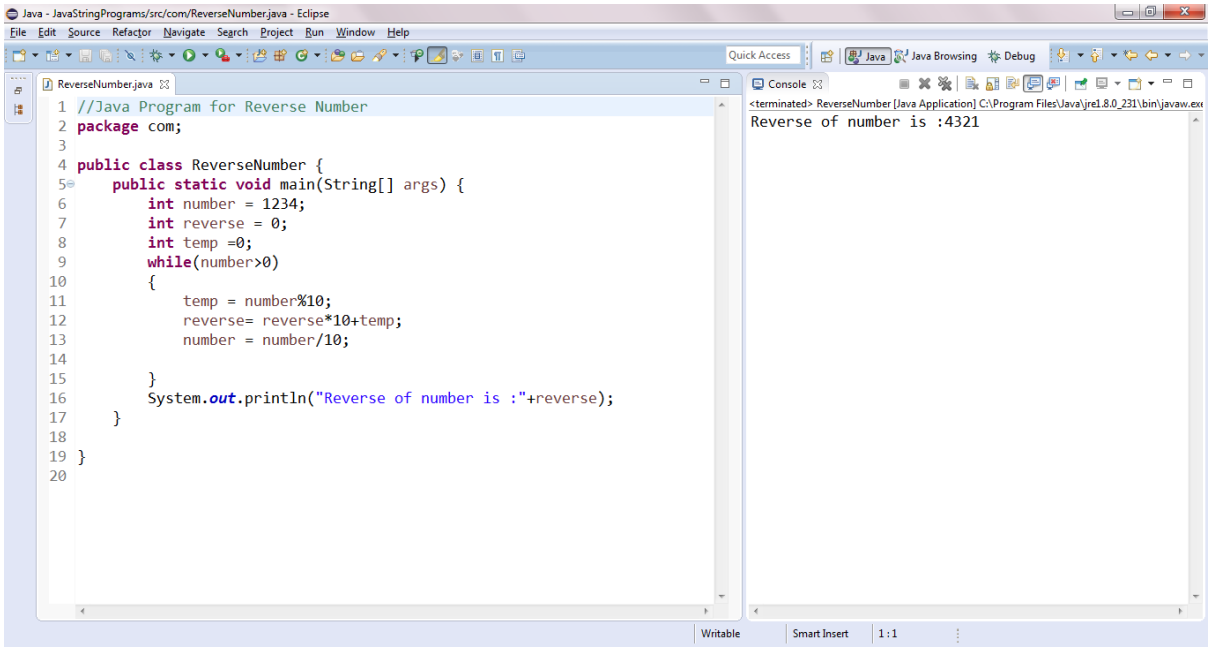
2) Fibonacci Series



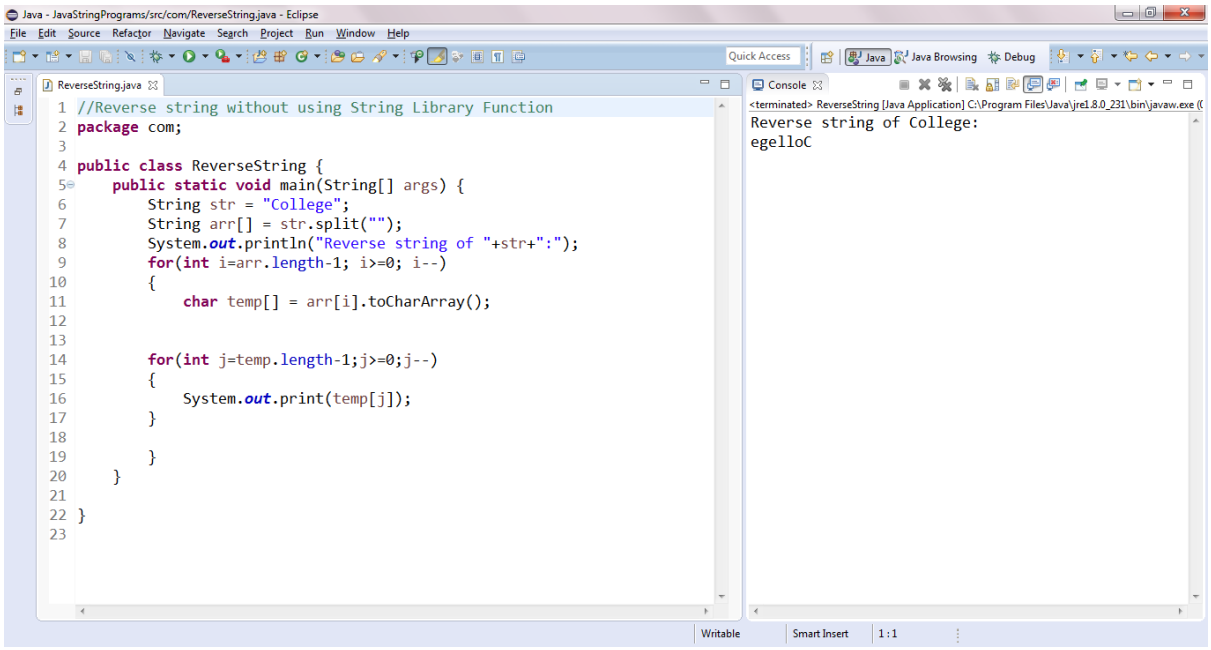
3) Swap Numbers



4) Reverse No



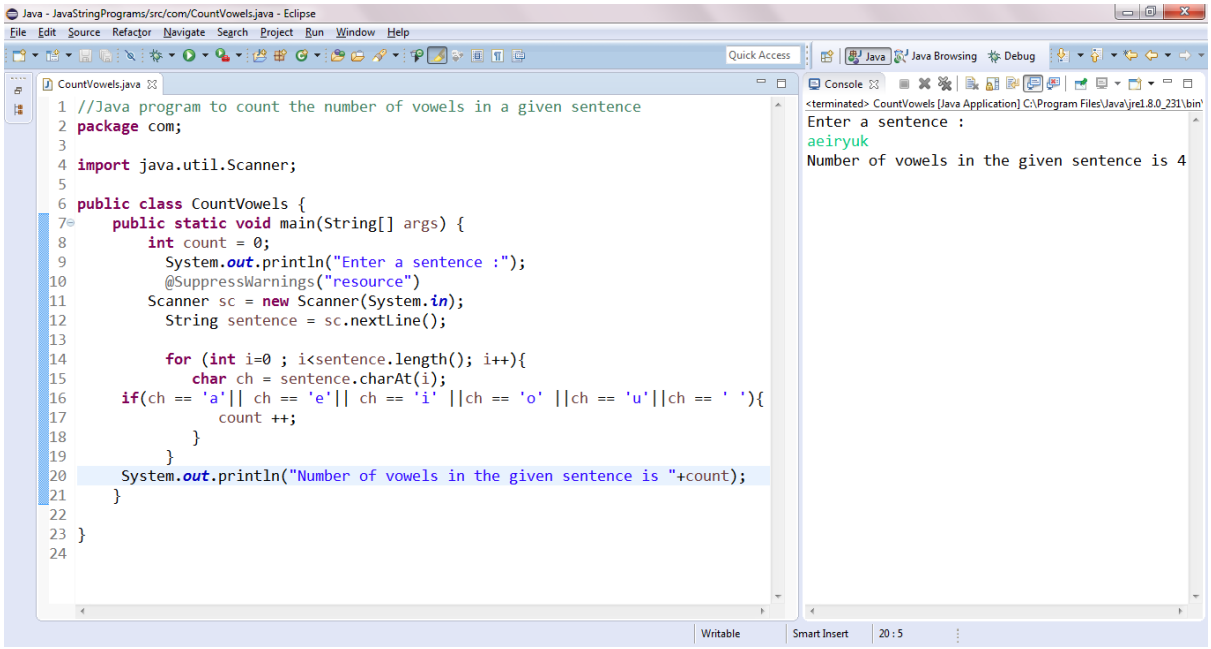
5) Reverse String



```java
//Reverse string without using String Library Function
package com;

public class ReverseString {
    public static void main(String[] args) {
        String str = "College";
        String arr[] = str.split("");
        System.out.println("Reverse string of "+str+":");
        for(int i=arr.length-1; i>=0; i--)
        {
            char temp[] = arr[i].toCharArray();


        for(int j=temp.length-1;j>=0;j--)
        {
            System.out.print(temp[j]);
        }

        }
    }

}
```

```
Reverse string of College:
egelloC
```

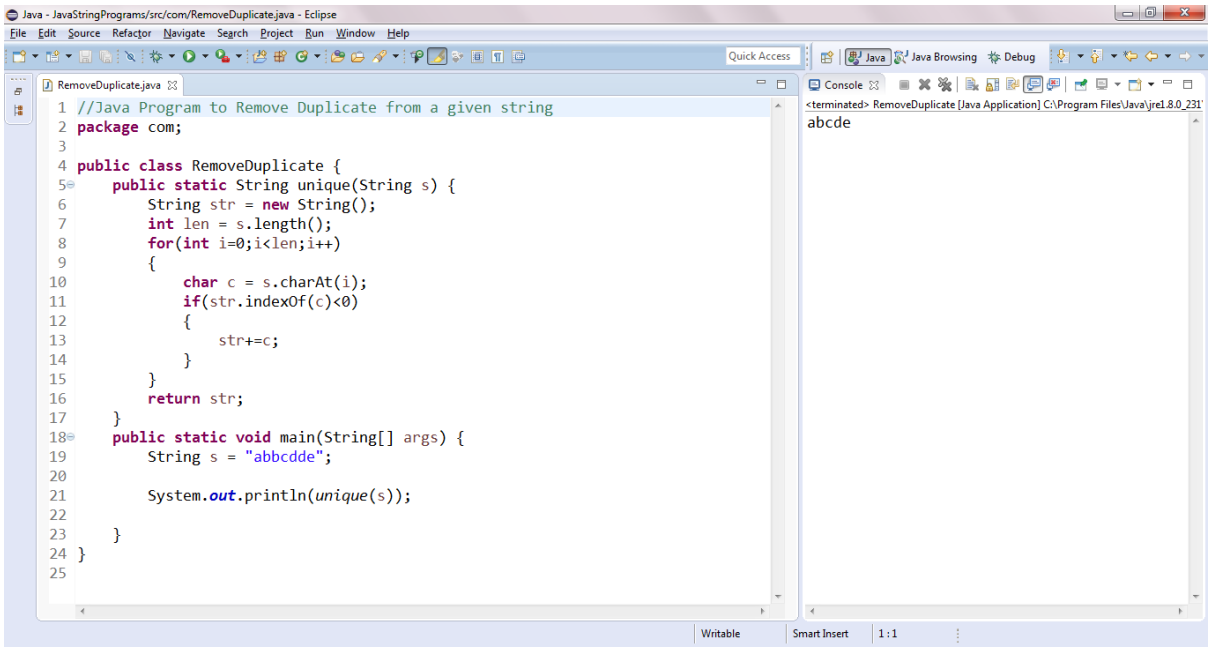
6) Count Vowels in String



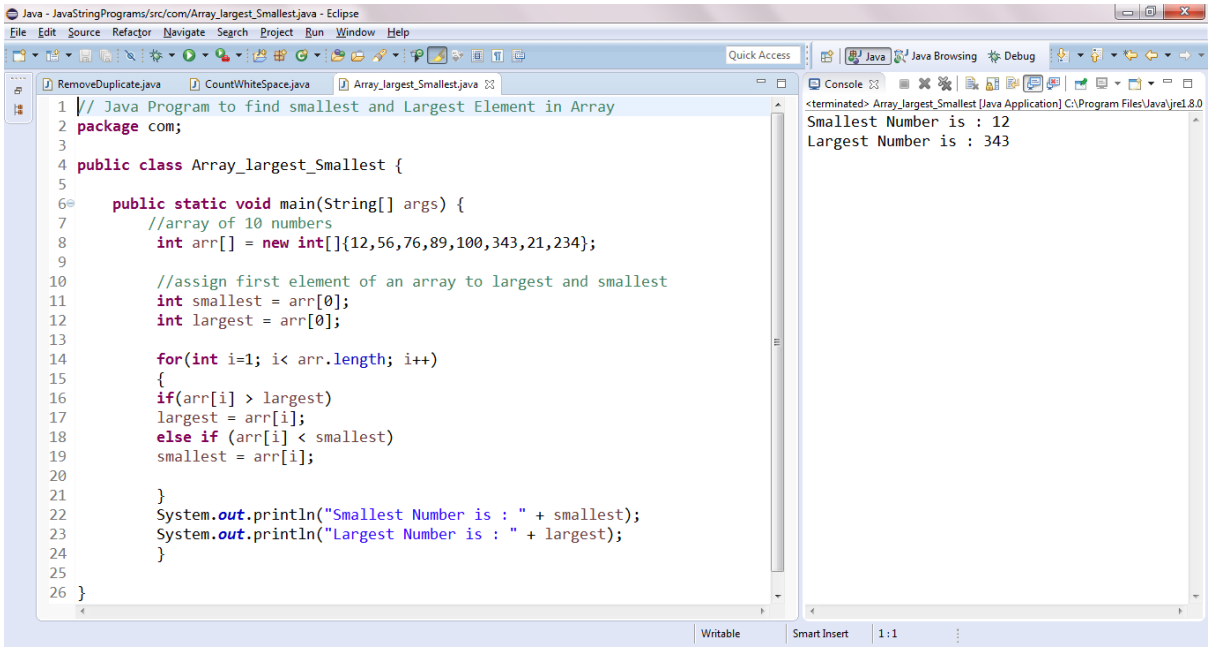
```java
//Java program to count the number of vowels in a given sentence
package com;

import java.util.Scanner;

public class CountVowels {
    public static void main(String[] args) {
        int count = 0;
          System.out.println("Enter a sentence :");
          @SuppressWarnings("resource")
        Scanner sc = new Scanner(System.in);
          String sentence = sc.nextLine();

          for (int i=0 ; i<sentence.length(); i++){
             char ch = sentence.charAt(i);
     if(ch == 'a'|| ch == 'e'|| ch == 'i' ||ch == 'o' ||ch == 'u'||ch == ' '){
                count ++;
            }
          }
     System.out.println("Number of vowels in the given sentence is "+count);
    }

}
```

```
Enter a sentence :
aeiryuk
Number of vowels in the given sentence is 4
```

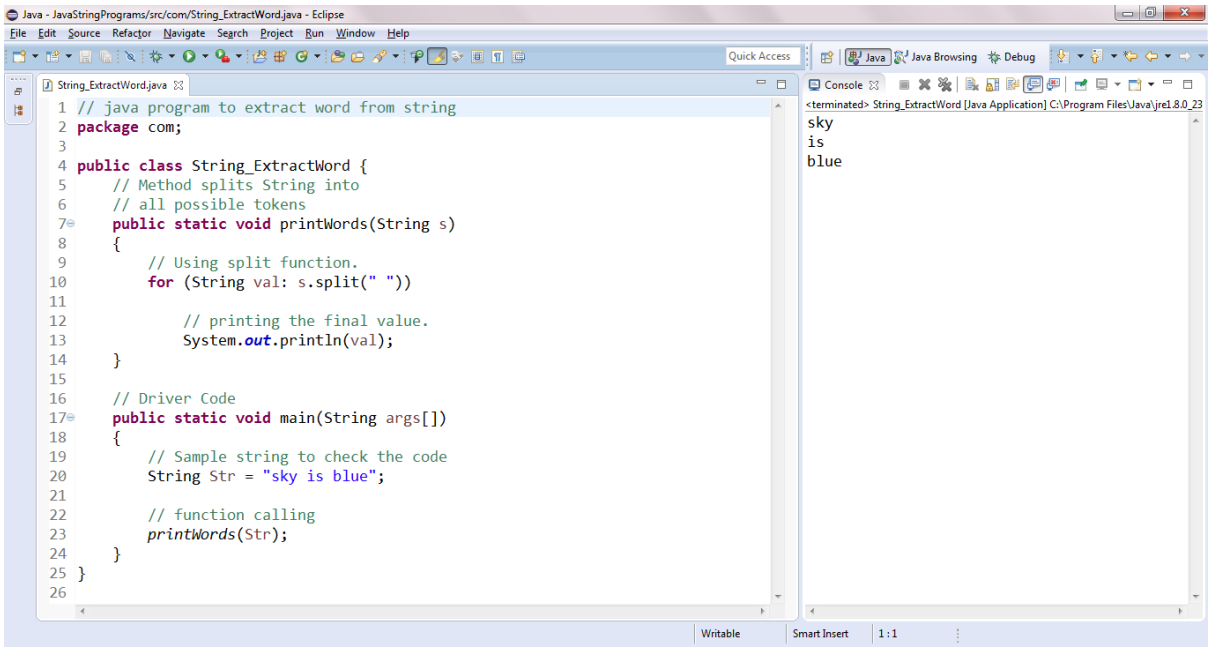
7) Remove Duplicates character in String



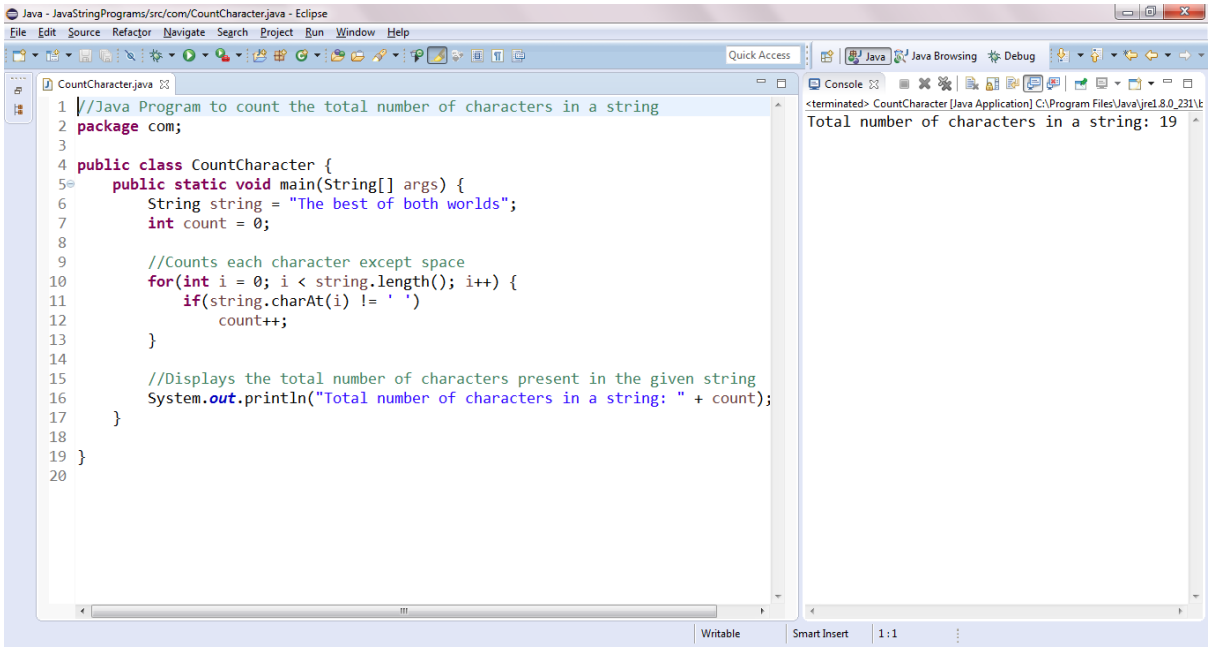
8) Java Program to find smallest and Largest Elements in Array



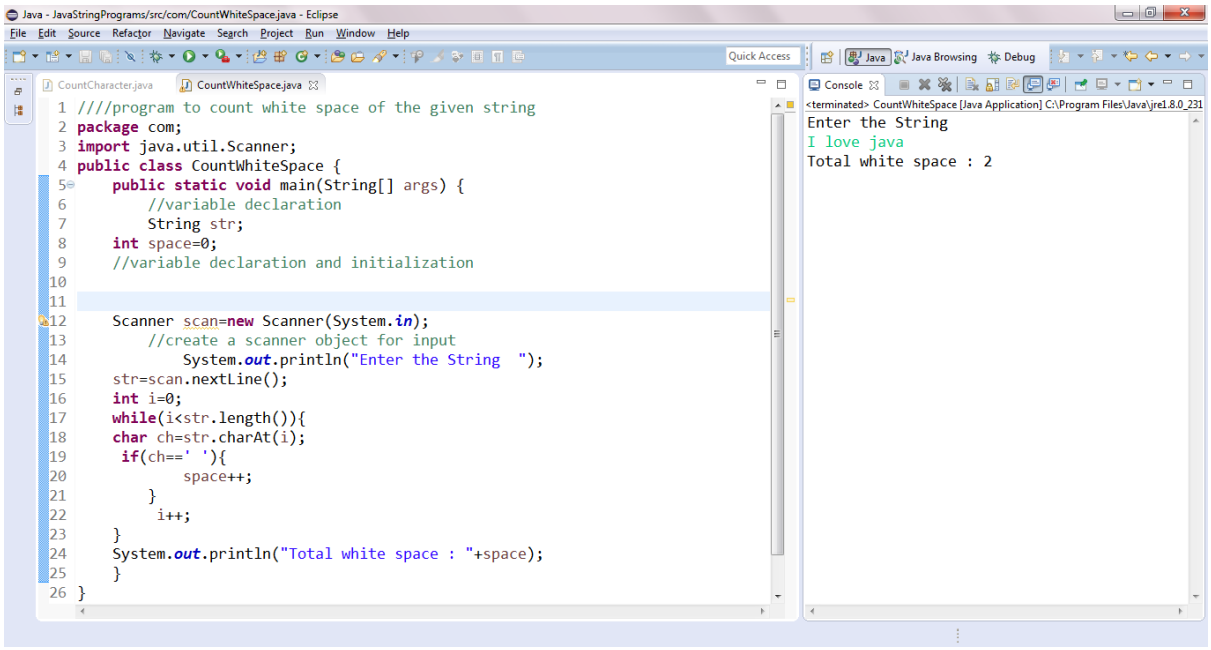
9) Java Program to Extract word from string



10) Java Program to count the total number of character in a string



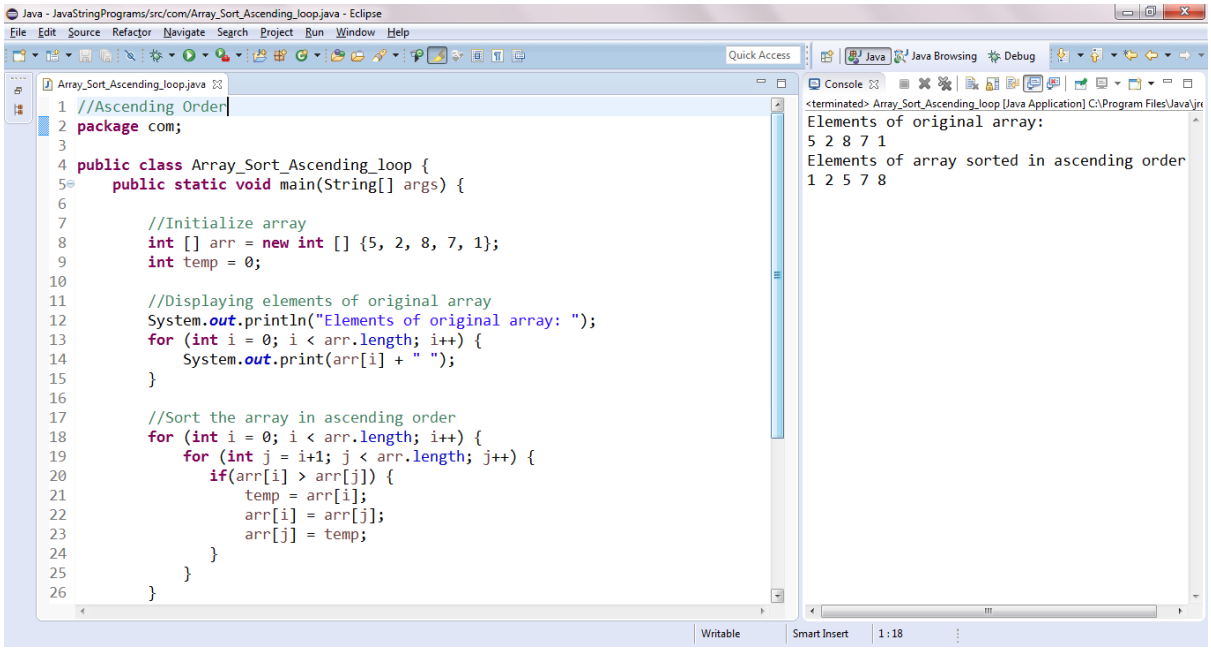
11) Java Program to count white space of the given string



```
////program to count white space of the given string
package com;
import java.util.Scanner;
public class CountWhiteSpace {
    public static void main(String[] args) {
        //variable declaration
        String str;
    int space=0;
    //variable declaration and initialization


    Scanner scan=new Scanner(System.in);
        //create a scanner object for input
            System.out.println("Enter the String  ");
    str=scan.nextLine();
    int i=0;
    while(i<str.length()){
    char ch=str.charAt(i);
     if(ch==' '){
            space++;
        }
         i++;
    }
    System.out.println("Total white space : "+space);
    }
}
```

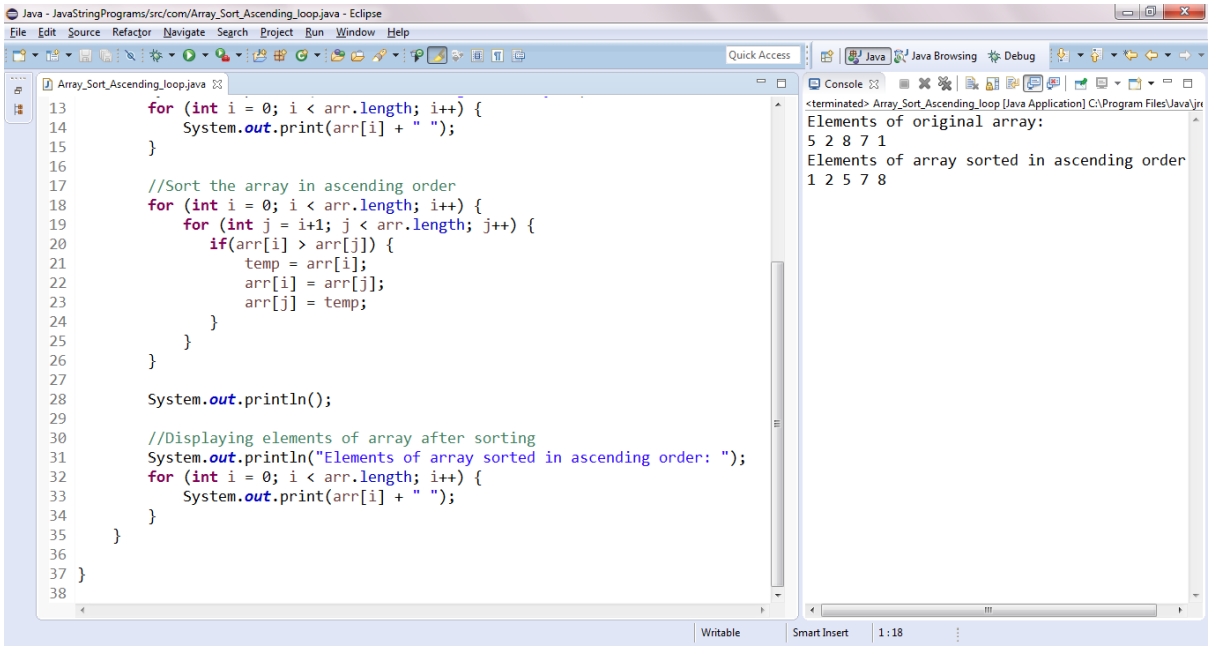
```
Enter the String
I love java
Total white space : 2
```

12) Sort the Array in Ascending Order

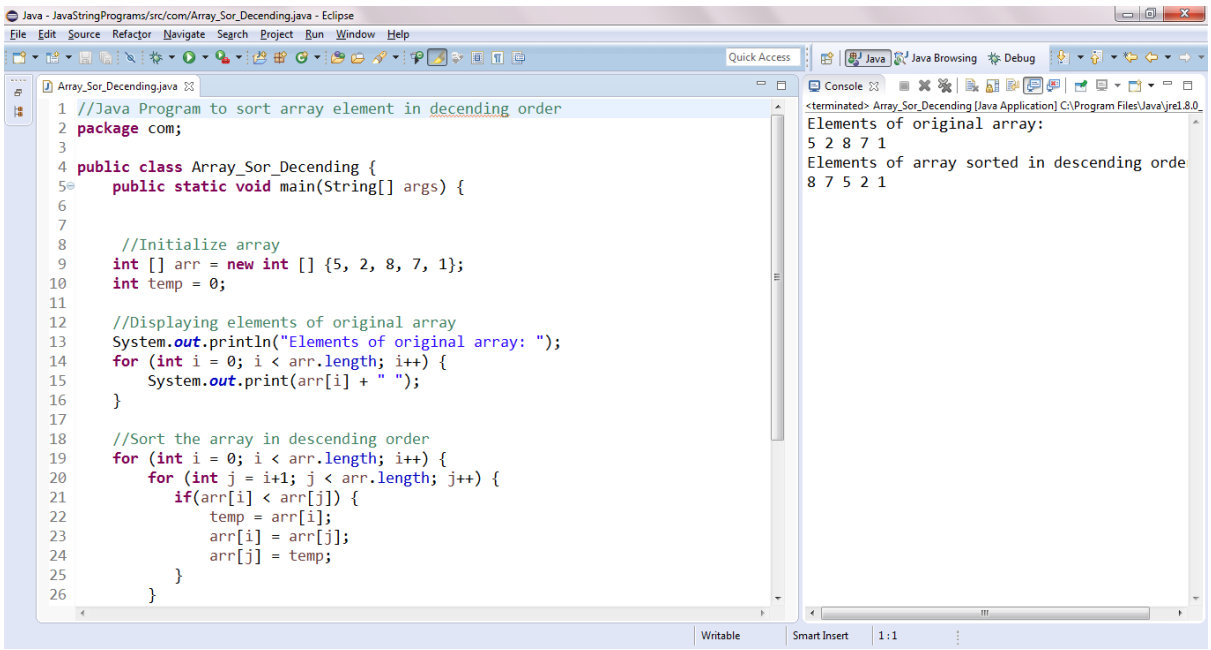


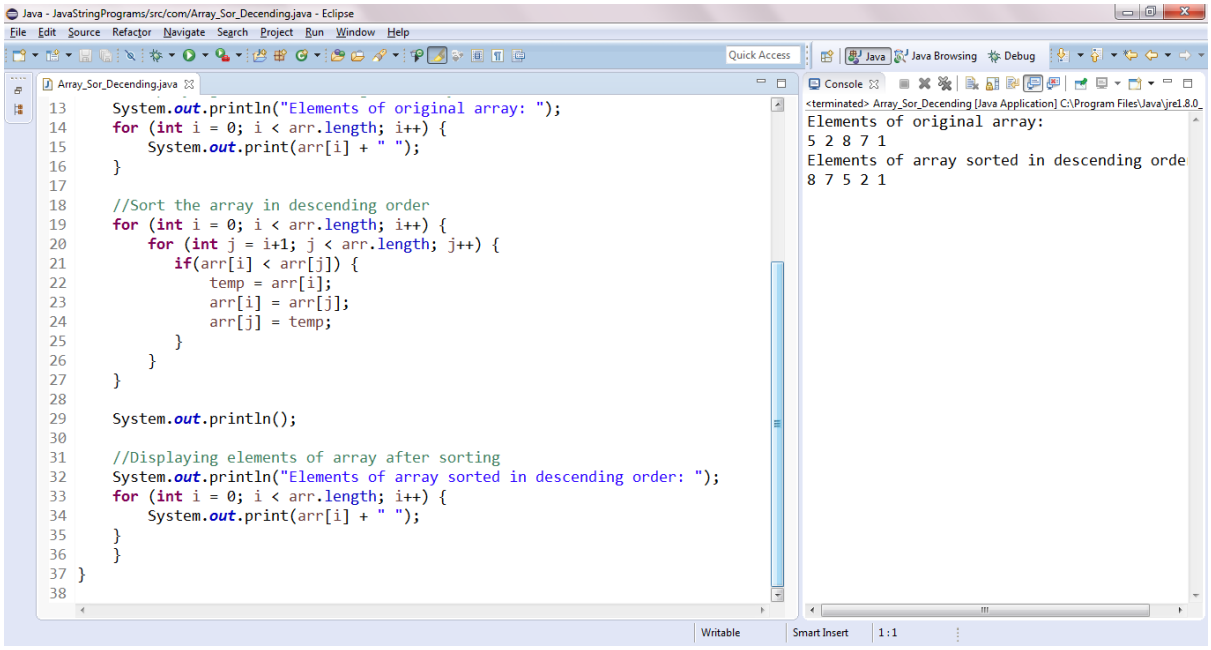
```
//Ascending Order
package com;

public class Array_Sort_Ascending_loop {
    public static void main(String[] args) {

        //Initialize array
        int [] arr = new int [] {5, 2, 8, 7, 1};
        int temp = 0;

        //Displaying elements of original array
        System.out.println("Elements of original array: ");
        for (int i = 0; i < arr.length; i++) {
            System.out.print(arr[i] + " ");
        }

        //Sort the array in ascending order
        for (int i = 0; i < arr.length; i++) {
            for (int j = i+1; j < arr.length; j++) {
               if(arr[i] > arr[j]) {
                    temp = arr[i];
                    arr[i] = arr[j];
                    arr[j] = temp;
                }
            }
        }
```

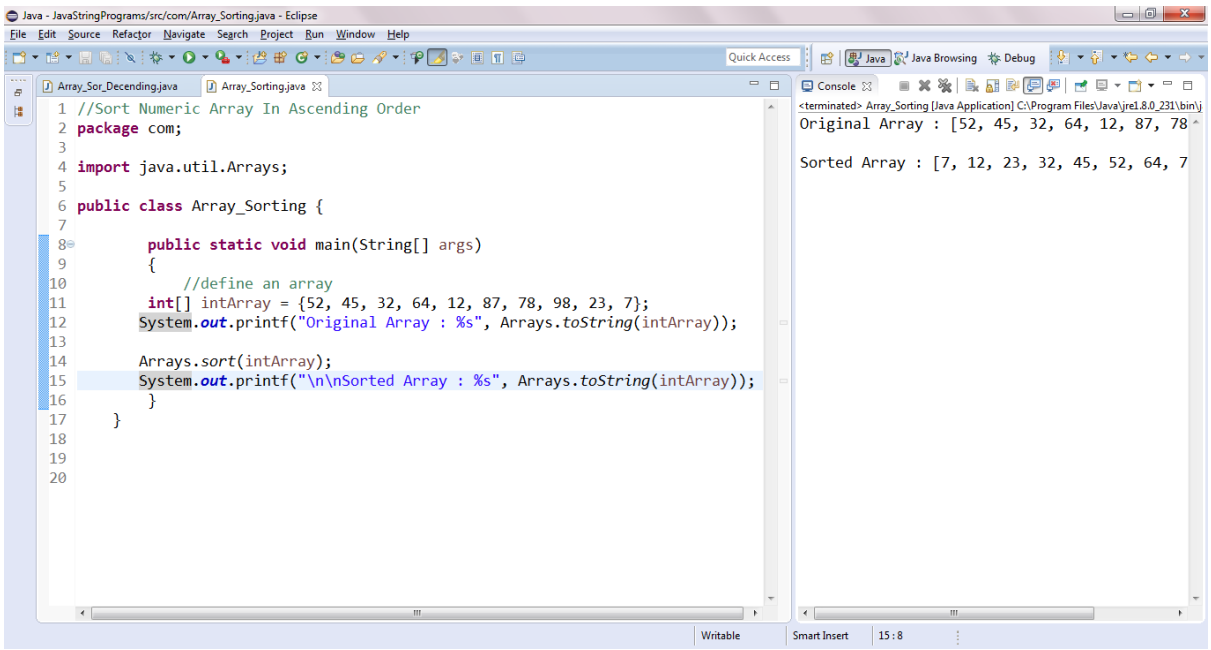
```
Elements of original array:
5 2 8 7 1
Elements of array sorted in ascending order
1 2 5 7 8
```

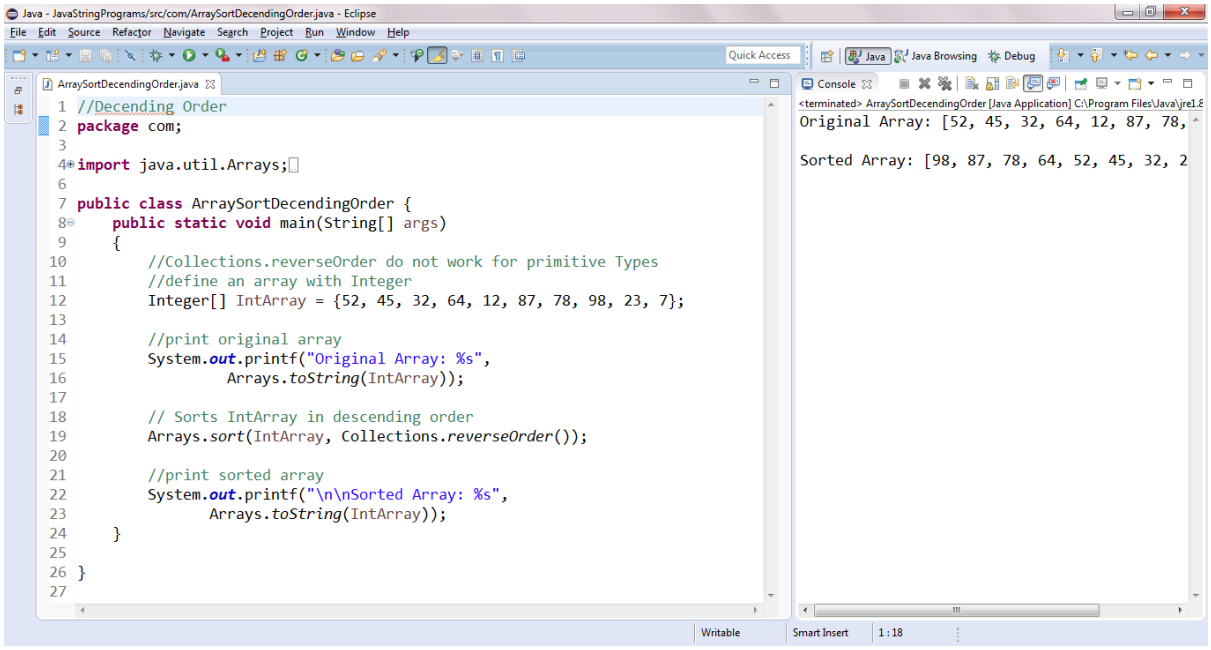


Sort the Array in Decending Order




Java - JavaStringPrograms/src/com/Array_Sor_Decending.java - Eclipse
File Edit Source Refactor Navigate Search Project Run Window Help
Quick Access
Java
Java Browsing
Debug
Array_Sor_Decending.java
System.out.println("Elements of original array: ");
for (int i = 0; i < arr.length; i++) {
System.out.print(arr[i] + " ");
}
//Sort the array in descending order
for (int i = 0; i < arr.length; i++) {
for (int j = i+1; j < arr.length; j++) {
if(arr[i] < arr[j]) {
temp = arr[i];
arr[i] = arr[j];
arr[j] = temp;
}
}
}
System.out.println();
//Displaying elements of array after sorting
System.out.println("Elements of array sorted in descending order: ");
for (int i = 0; i < arr.length; i++) {
System.out.print(arr[i] + " ");
}
}
}
Console
<terminated> Array_Sor_Decending [Java Application] C:\Program Files\Java\jre1.8.0_
Elements of original array:
5 2 8 7 1
Elements of array sorted in descending orde
8 7 5 2 1
Writable
Smart Insert
1 : 1

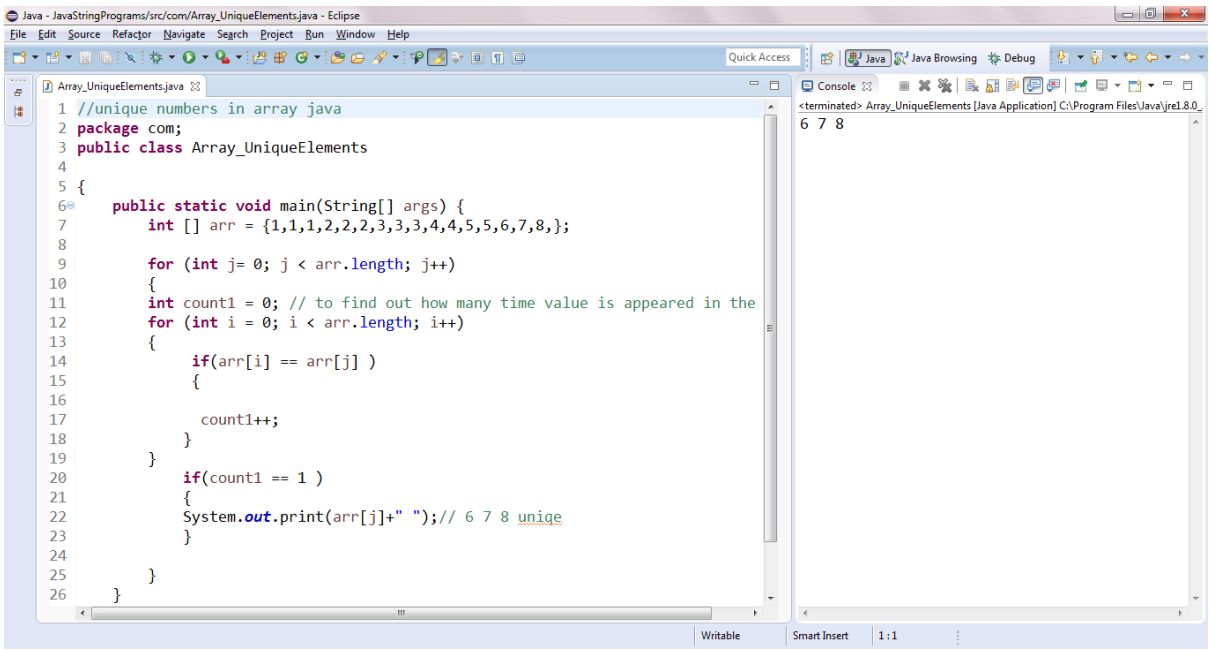

Java - JavaStringPrograms/src/com/Array_Sorting.java - Eclipse
File Edit Source Refactor Navigate Search Project Run Window Help
Quick Access
Java
Java Browsing
Debug
Array_Sor_Decending.java
Array_Sorting.java
//Sort Numeric Array In Ascending Order
package com;
import java.util.Arrays;
public class Array_Sorting {
public static void main(String[] args)
{
//define an array
int[] intArray = {52, 45, 32, 64, 12, 87, 78, 98, 23, 7};
System.out.printf("Original Array : %s", Arrays.toString(intArray));
Arrays.sort(intArray);
System.out.printf("\n\nSorted Array : %s", Arrays.toString(intArray));
}
}
Console
<terminated> Array_Sorting [Java Application] C:\Program Files\Java\jre1.8.0_231\bin\j
Original Array : [52, 45, 32, 64, 12, 87, 78
Sorted Array : [7, 12, 23, 32, 45, 52, 64, 7
Writable
Smart Insert
15 : 8



```
//Decending Order
package com;

import java.util.Arrays;

public class ArraySortDecendingOrder {
    public static void main(String[] args)
    {
        //Collections.reverseOrder do not work for primitive Types
        //define an array with Integer
        Integer[] IntArray = {52, 45, 32, 64, 12, 87, 78, 98, 23, 7};

        //print original array
        System.out.printf("Original Array: %s",
                Arrays.toString(IntArray));

        // Sorts IntArray in descending order
        Arrays.sort(IntArray, Collections.reverseOrder());

        //print sorted array
        System.out.printf("\n\nSorted Array: %s",
               Arrays.toString(IntArray));
    }

}
```

```
Original Array: [52, 45, 32, 64, 12, 87, 78,

Sorted Array: [98, 87, 78, 64, 52, 45, 32, 2
```

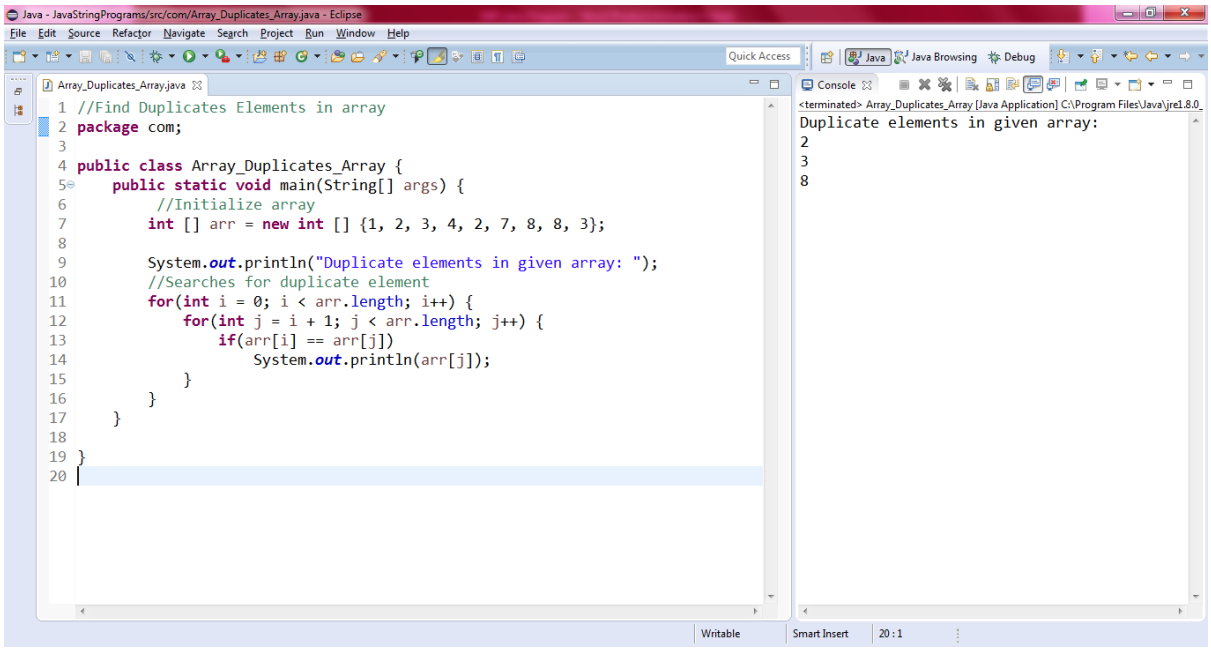
13) Find Unique Elements in Array



```
//unique numbers in array java
package com;
public class Array_UniqueElements

{
    public static void main(String[] args) {
        int [] arr = {1,1,1,2,2,2,3,3,3,4,4,5,5,6,7,8,};

        for (int j= 0; j < arr.length; j++)
        {
        int count1 = 0; // to find out how many time value is appeared in the
        for (int i = 0; i < arr.length; i++)
        {
             if(arr[i] == arr[j] )
             {

              count1++;
            }
        }
            if(count1 == 1 )
            {
            System.out.print(arr[j]+" ");// 6 7 8 uniqe
            }

        }
    }
```

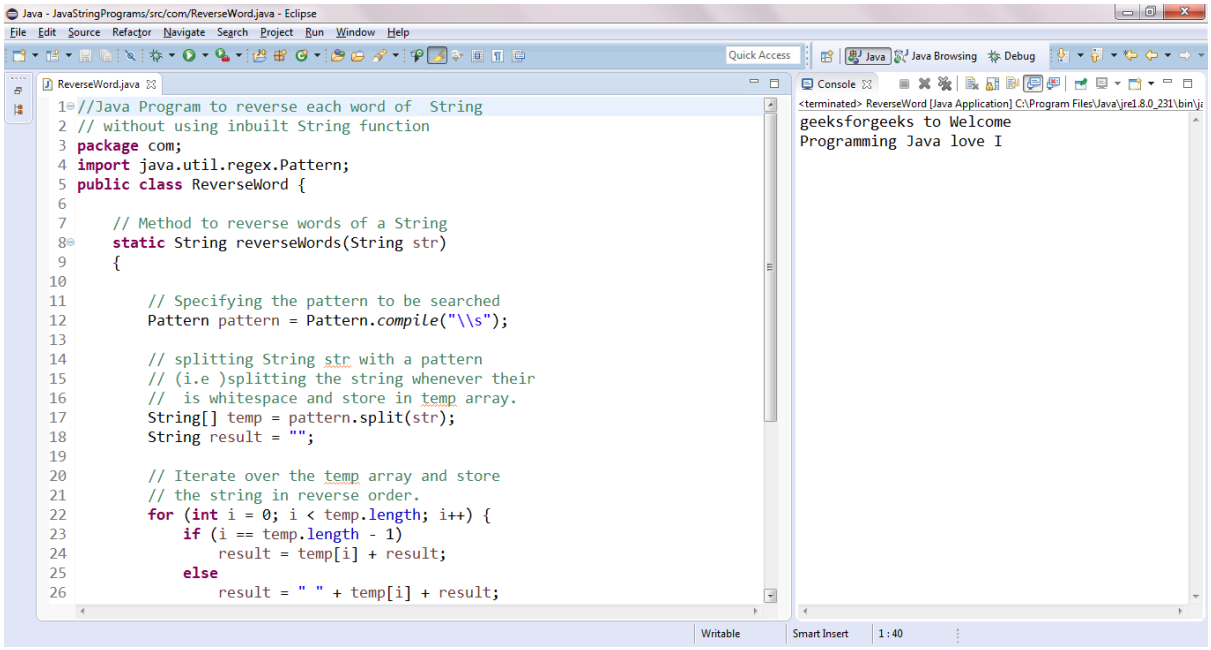
```
6 7 8
```

14) Find Duplicate Element in Array

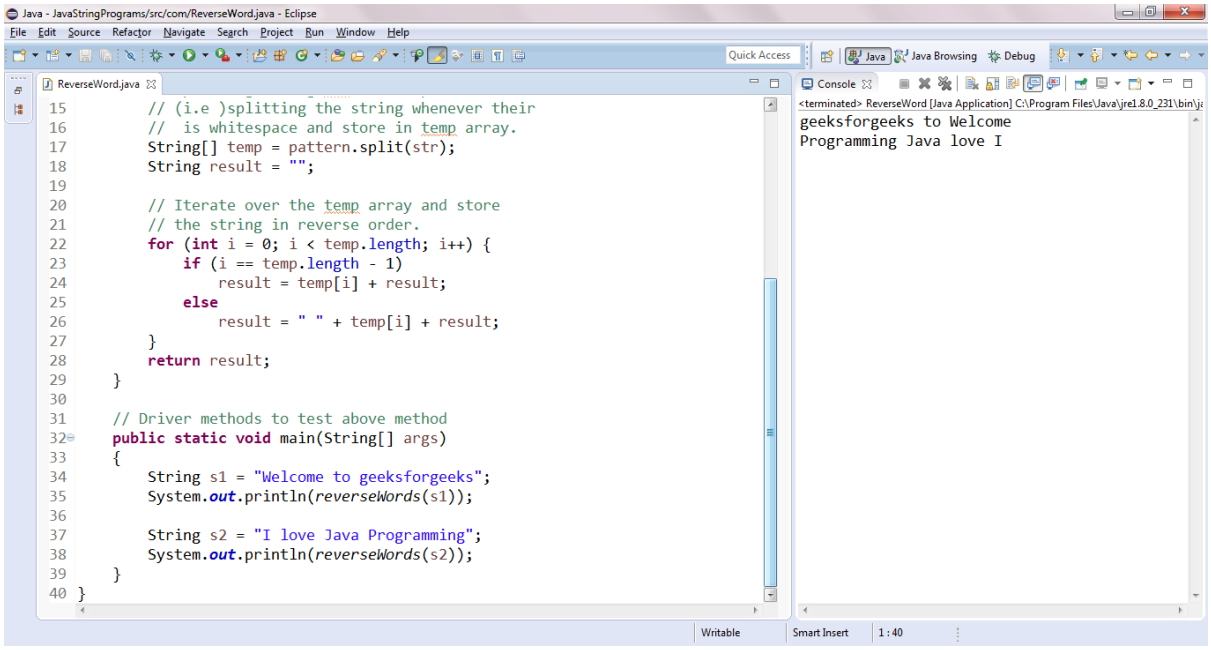



```java
//Find Duplicates Elements in array
package com;

public class Array_Duplicates_Array {
    public static void main(String[] args) {
         //Initialize array
        int [] arr = new int [] {1, 2, 3, 4, 2, 7, 8, 8, 3};

        System.out.println("Duplicate elements in given array: ");
        //Searches for duplicate element
        for(int i = 0; i < arr.length; i++) {
            for(int j = i + 1; j < arr.length; j++) {
                if(arr[i] == arr[j])
                    System.out.println(arr[j]);
            }
        }
    }

}
```

15) Java Program for Reverse Each word of String




```java
//Java Program to reverse each word of  String
// without using inbuilt String function
package com;
import java.util.regex.Pattern;
public class ReverseWord {

    // Method to reverse words of a String
    static String reverseWords(String str)
    {

        // Specifying the pattern to be searched
        Pattern pattern = Pattern.compile("\\s");

        // splitting String str with a pattern
        // (i.e )splitting the string whenever their
        //  is whitespace and store in temp array.
        String[] temp = pattern.split(str);
        String result = "";

        // Iterate over the temp array and store
        // the string in reverse order.
        for (int i = 0; i < temp.length; i++) {
            if (i == temp.length - 1)
                result = temp[i] + result;
            else
                result = " " + temp[i] + result;
```


Java - JavaStringPrograms/src/com/ReverseWord.java - Eclipse
File Edit Source Refactor Navigate Search Project Run Window Help
Quick Access
Java
Java Browsing
Debug
ReverseWord.java
15 // (i.e)splitting the string whenever their
16 // is whitespace and store in temp array.
17 String[] temp = pattern.split(str);
18 String result = "";
19
20 // Iterate over the temp array and store
21 // the string in reverse order.
22 for (int i = 0; i < temp.length; i++) {
23 if (i == temp.length - 1)
24 result = temp[i] + result;
25 else
26 result = " " + temp[i] + result;
27 }
28 return result;
29 }
30
31 // Driver methods to test above method
32 public static void main(String[] args)
33 {
34 String s1 = "Welcome to geeksforgeeks";
35 System.out.println(reverseWords(s1));
36
37 String s2 = "I love Java Programming";
38 System.out.println(reverseWords(s2));
39 }
40 }
Console
<terminated> ReverseWord [Java Application] C:\Program Files\Java\jre1.8.0_231\bin\j
geeksforgeeks to Welcome
Programming Java love I
Writable
Smart Insert
1 : 40