

2)import java.util.Arrays;

public class Main

```
{
    private static int[] mergeArray(int[] array1, int[] array2)
    {
        System.out.println("Author:D.Aditya Varma\nSAP ID:51834693");
        int[] mergedArray = new int[array1.length + array2.length];

        int a=0, b=0, c=0;

        while (a < array1.length)
        {
            mergedArray[c] = array1[a];
            a++;
            c++;
        }

        while (b < array2.length)
        {
            mergedArray[c] = array2[b];
            b++;
            c++;
        }

        Arrays.sort(mergedArray);

        return mergedArray;
    }

    public static void main(String[] args)
    {
        int[] array1 = new int[] { 12, -7, 18, 9, 37, -1, 21 };

        int[] array2 = new int[] { 27, 8, 71, -9, 18 };

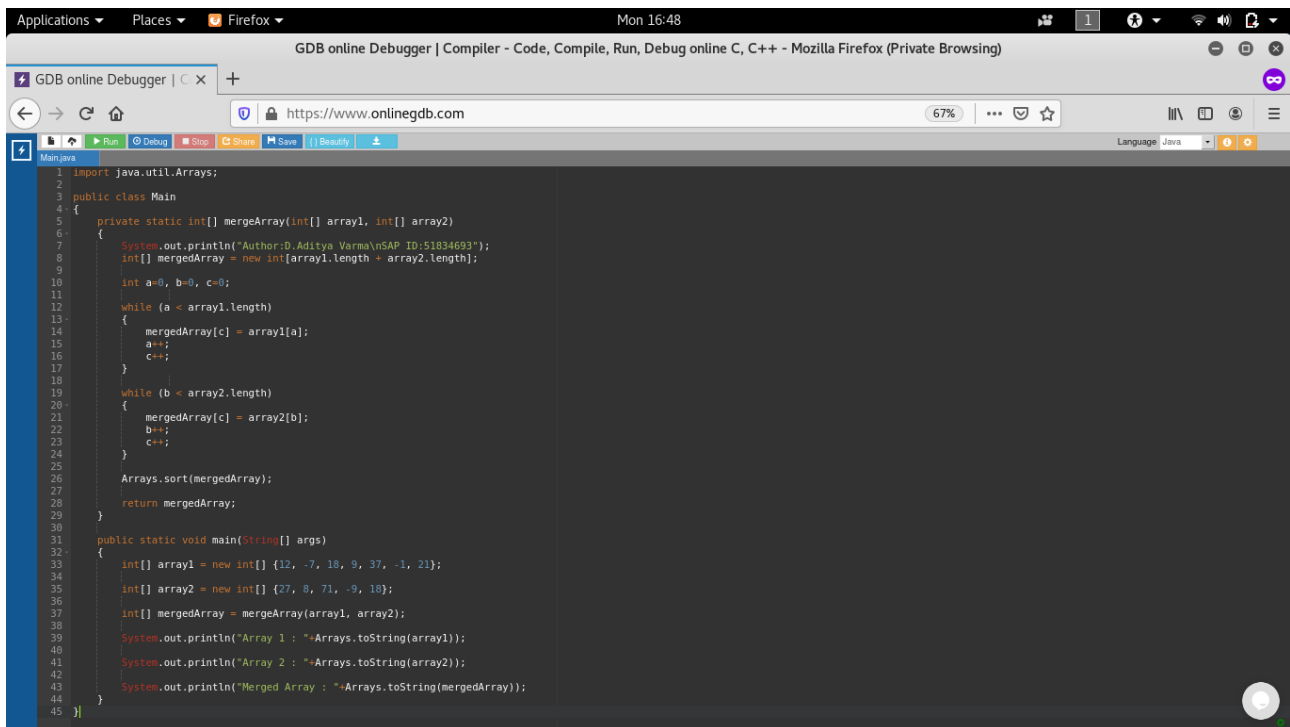
        int[] mergedArray = mergeArray(array1, array2);

        System.out.println("Array 1 : "+Arrays.toString(array1));

        System.out.println("Array 2 : "+Arrays.toString(array2));

        System.out.println("Merged Array : "+Arrays.toString(mergedArray));
    }
}
```

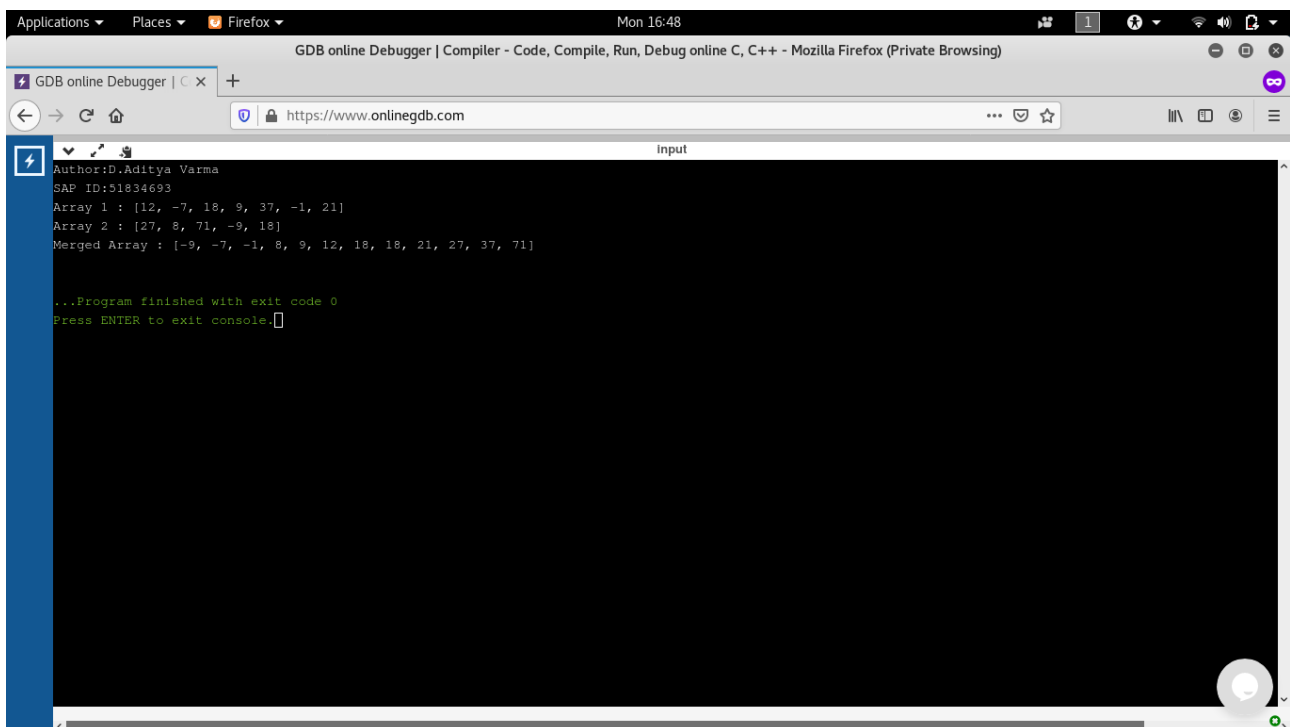
Input:



The screenshot shows the GDB online Debugger interface in a Mozilla Firefox browser. The code is a Java program that merges two arrays. It includes a `mergeArray` method that uses two `while` loops to merge the arrays and then sorts the result. The `main` method initializes two arrays, `array1` and `array2`, and prints their contents and the merged array.

```
1 import java.util.Arrays;
2
3 public class Main
4 {
5     private static int[] mergeArray(int[] array1, int[] array2)
6     {
7         System.out.println("Author:D.Aditya Varma\nSAP ID:51834693");
8         int[] mergedArray = new int[array1.length + array2.length];
9
10        int a=0, b=0, c=0;
11
12        while (a < array1.length)
13        {
14            mergedArray[c] = array1[a];
15            a++;
16            c++;
17        }
18
19        while (b < array2.length)
20        {
21            mergedArray[c] = array2[b];
22            b++;
23            c++;
24        }
25
26        Arrays.sort(mergedArray);
27
28        return mergedArray;
29    }
30
31    public static void main(String[] args)
32    {
33        int[] array1 = new int[] {12, -7, 18, 9, 37, -1, 21};
34        int[] array2 = new int[] {27, 8, 71, -9, 18};
35
36        int[] mergedArray = mergeArray(array1, array2);
37
38        System.out.println("Array 1 : "+Arrays.toString(array1));
39        System.out.println("Array 2 : "+Arrays.toString(array2));
40        System.out.println("Merged Array : "+Arrays.toString(mergedArray));
41    }
42 }
43
44
45 }
```

Output:



The screenshot shows the output of the Java program in the GDB online Debugger. The output displays the author's name, SAP ID, and the contents of the two input arrays. The merged array is also shown, sorted in ascending order. The program finishes with exit code 0.

```
Author:D.Aditya Varma
SAP ID:51834693
Array 1 : [12, -7, 18, 9, 37, -1, 21]
Array 2 : [27, 8, 71, -9, 18]
Merged Array : [-9, -7, -1, 8, 9, 12, 18, 18, 21, 27, 37, 71]

...Program finished with exit code 0
Press ENTER to exit console.
```

5)

```
import java.util.Scanner;
```

```
public class Main  
{
```

```
    public static void main(String args[])  
    {
```

```
        System.out.println("Author:D.Aditya Varma\nSAP ID:51834693");
```

```
        System.out.println("Enter the string");
```

```
        Scanner sc = new Scanner(System.in);
```

```
        String a = sc.nextLine();
```

```
        int count = 1;
```

```
        for (int x = 0; x < a.length() - 1; x++)
```

```
        {
```

```
            if ((a.charAt(x) == ' ') && (a.charAt(x + 1) != ' '))
```

```
            {
```

```
                count++;
```

```
            }
```

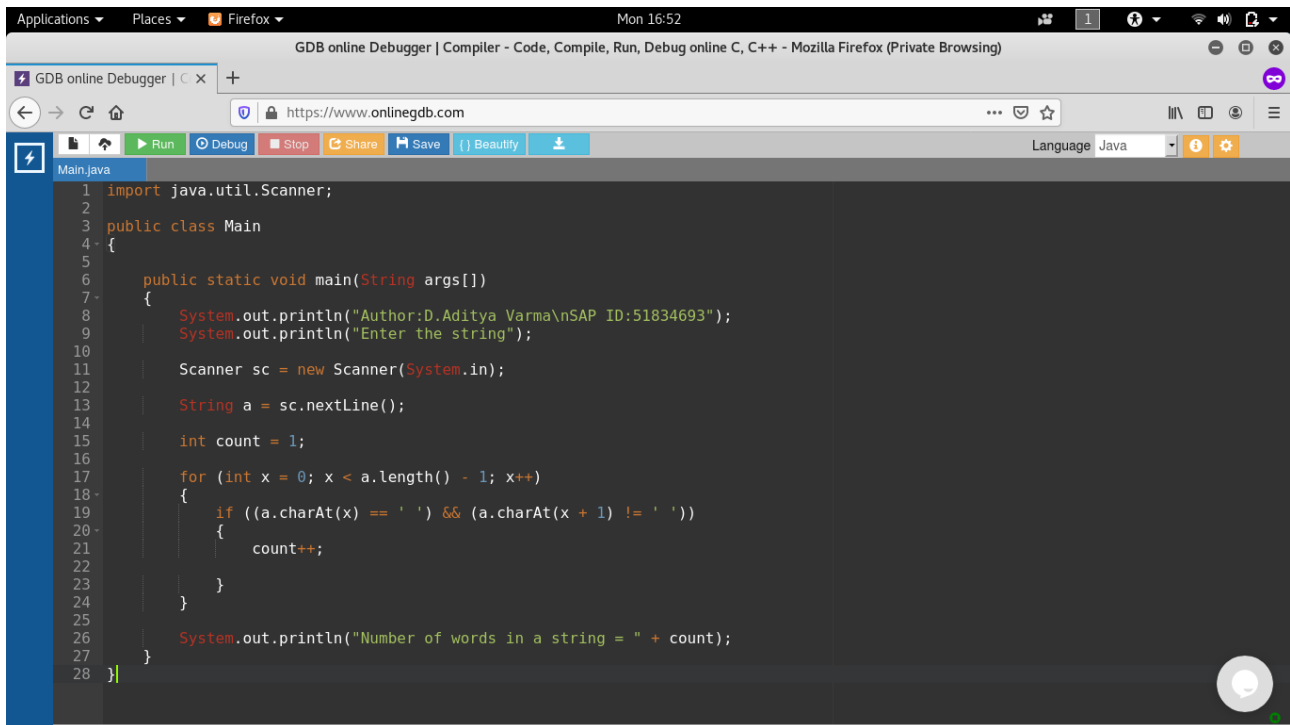
```
        }
```

```
        System.out.println("Number of words in a string = " + count);
```

```
    }
```

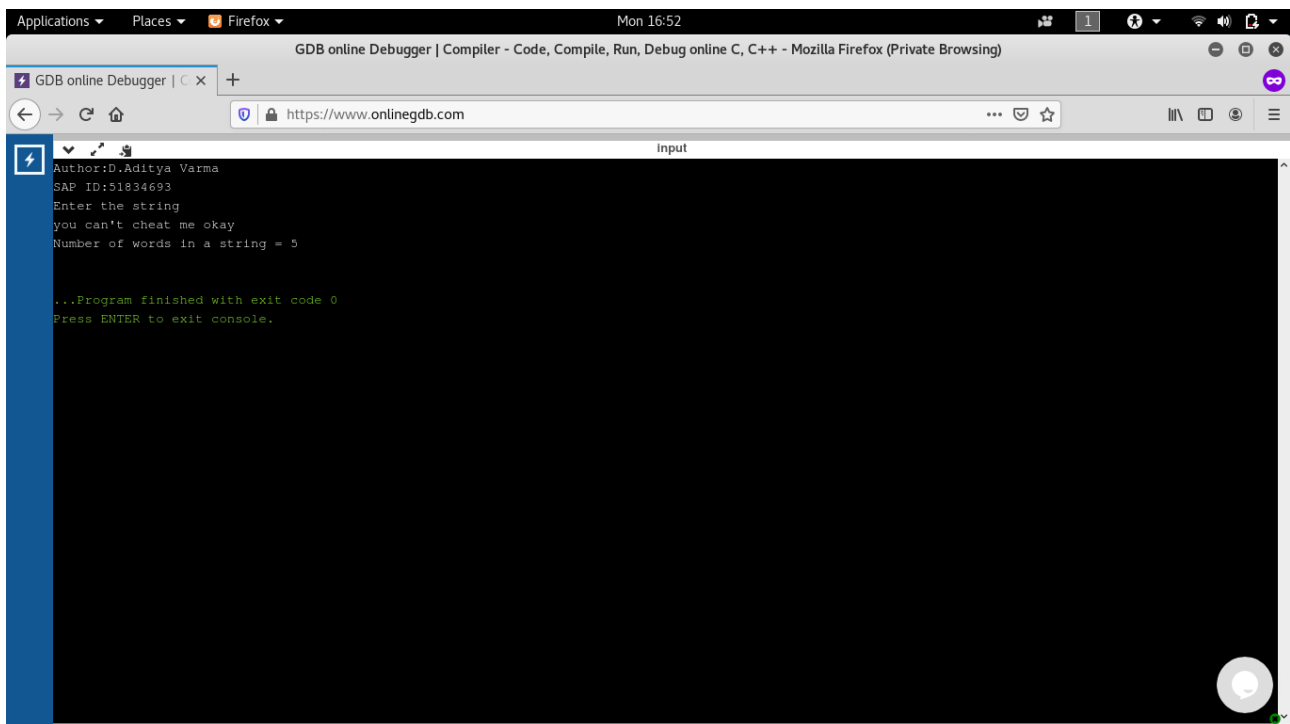
```
}
```

Input:



```
1 import java.util.Scanner;
2
3 public class Main
4 {
5
6     public static void main(String args[])
7     {
8         System.out.println("Author:D.Aditya Varma\nSAP ID:51834693");
9         System.out.println("Enter the string");
10
11         Scanner sc = new Scanner(System.in);
12
13         String a = sc.nextLine();
14
15         int count = 1;
16
17         for (int x = 0; x < a.length() - 1; x++)
18         {
19             if ((a.charAt(x) == ' ') && (a.charAt(x + 1) != ' '))
20             {
21                 count++;
22             }
23         }
24
25         System.out.println("Number of words in a string = " + count);
26     }
27 }
28 }
```

Output:



```
Author:D.Aditya Varma
SAP ID:51834693
Enter the string
you can't cheat me okay
Number of words in a string = 5

...Program finished with exit code 0
Press ENTER to exit console.
```