# Source Code

```
import java.util.*;
/*Q1. Write a Java program to find the longest common prefix string amongst an
array of strings.If there is no common prefix, return an empty string "". */

public class Q1 {
   public static void main(String args[])
   {
      Scanner scr = new Scanner(System.in);
      System.out.println("Enter the number of Strings in String array :");
      int num=scr.nextInt();
      String arr[] = new String[num];
      System.out.println("Enter Strings "+num+" in String array :");
      int min=100;
      for(int i =0;i<num;i++)
      {
         arr[i]=scr.next();
         if(arr[i].length()<min)
            min=arr[i].length();
      }
      String str="";
      char ch1=' ';
      for(int i =0; i<min ; i++)
      {
         for(int j =0; j<num-1 ; j++)
         {
            if(arr[j].charAt(i)==arr[j+1].charAt(i))
               ch1=arr[j].charAt(i);
            else
               {
                  ch1=' ';
```



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```
                    break;
                }
            }
            if(ch1!=' ')
                str+=ch1;
        }
        System.out.println("Common Prefix in given String array is :"+str);

        scr.close();
    }

}
```



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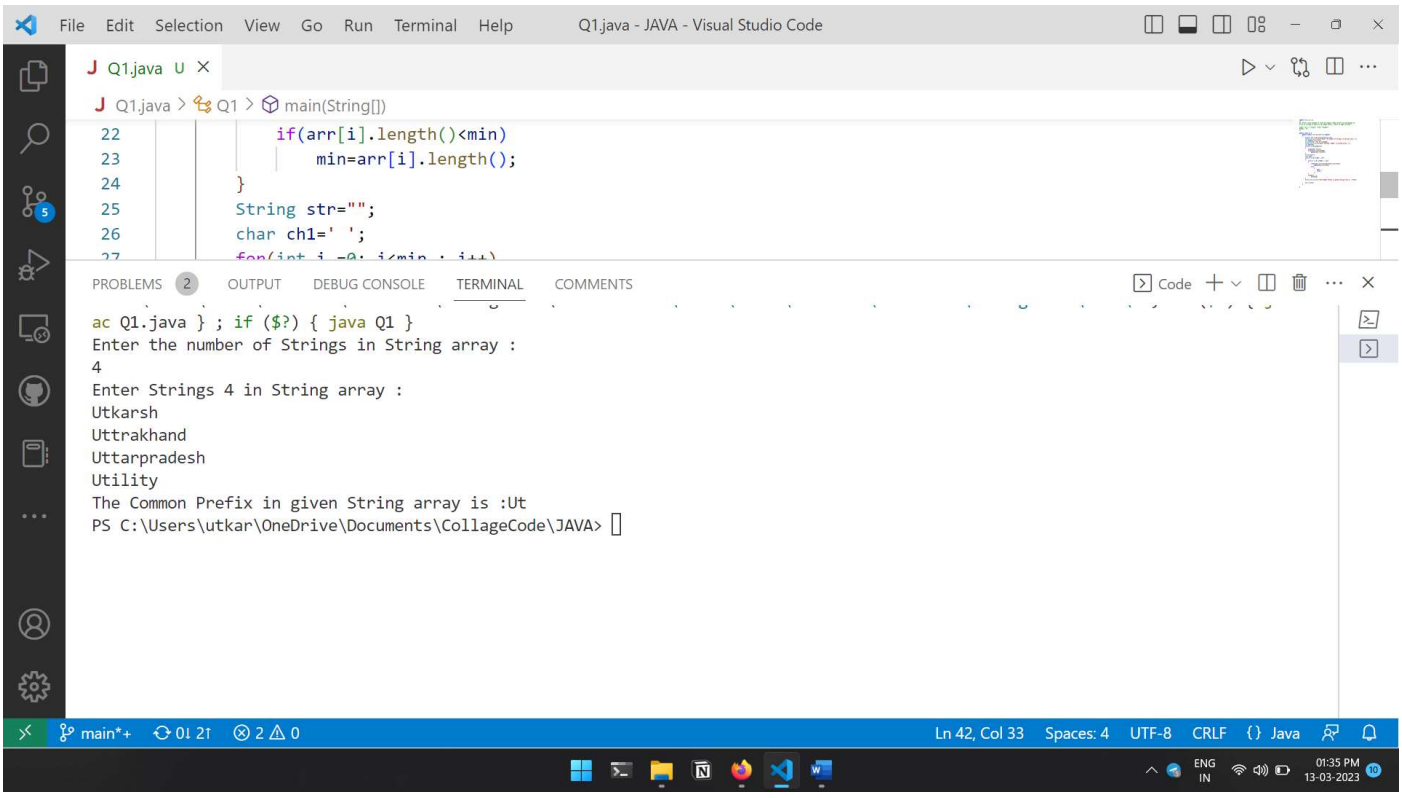
# Output



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# Source Code

```
/*Write a program to calculate the length of Last Word .*/
import java.util.*;
public class Q2 {
   public static void main(String args[])
   {
      Scanner scr = new Scanner(System.in);
      String str;
      System.out.println("Enter a String :");
      str=scr.nextLine();
      int len=str.length();
      int L=len;
      int ans=0;
      for(int i=0;i<len; i++)
      {
         if(str.charAt(i)!=32)
            L=i;
      }
      while(str.charAt(L)!=' ')
      {
         ans++;
         L--;
      }
      System.out.println("The length of last string is :"+ans);
      scr.close();
   }
}
```



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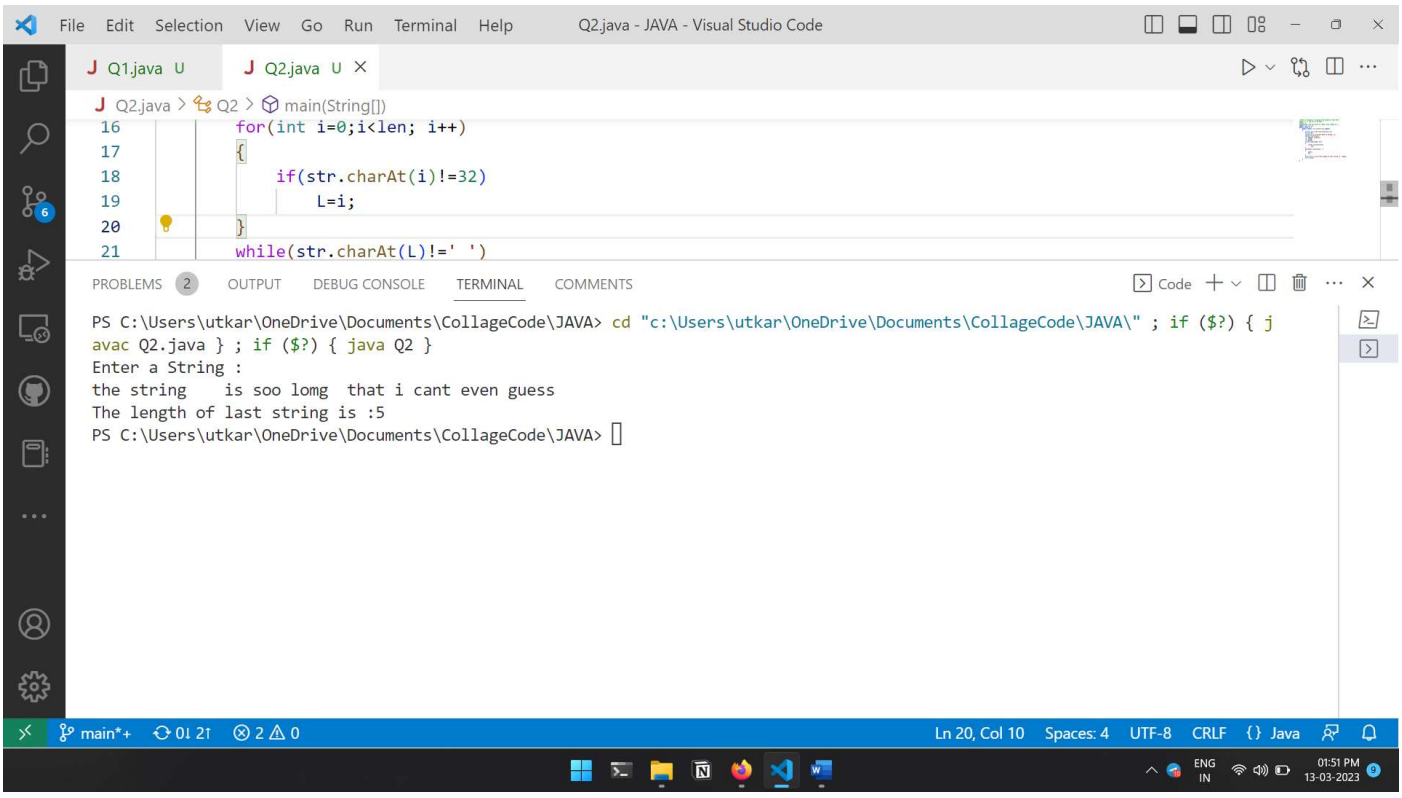
# Output



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# Source Code

```
/*Write a program to return corresponding column title as it appears in an Excel
sheet for a given number
 */


import java.util.*;
public class Q3 {
   public static void main(String args[])
   {
      Scanner scr = new Scanner (System.in);
      int x=0;
      System.out.println("Enter the Excel Column num: ");
      x=scr.nextInt();
      int temp=x;
      String str="";
      while(temp>26)
      {
         int a = x%26;
         char ch =(char)(a+64);
         str+=ch;
         temp=temp/26;
      }
      temp+=64;
      char ch= (char)temp;
      str=ch+str;
      System.out.println(str);
      scr.close();
   }
}
```



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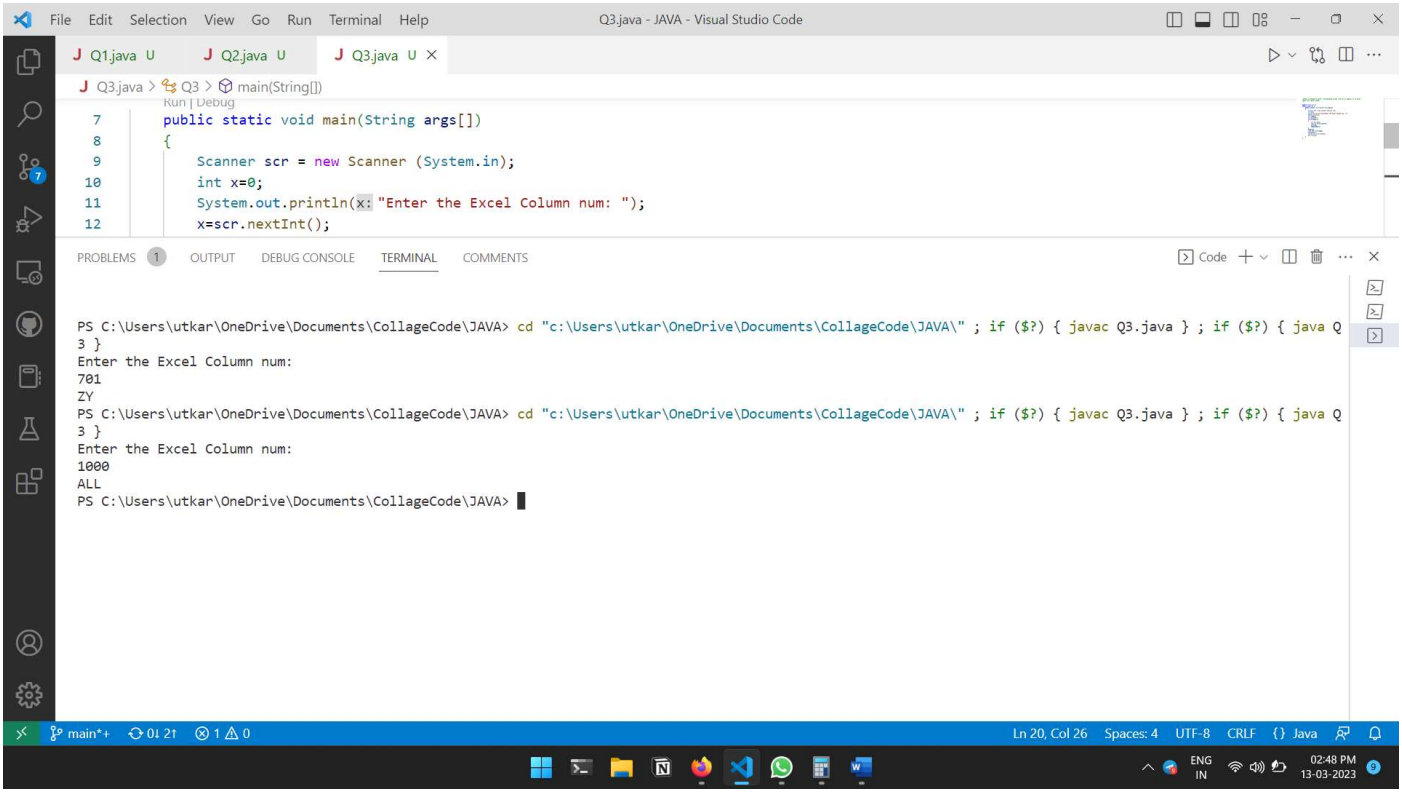
# Output



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# Source Code

```
/*Write a program to check valid palindrome. */


import java.util.*;
public class Q4 {
   static boolean palindrome(String a)
   {
      for(int i=0; i<(a.length()/2); i++)
      {
         if(a.charAt(i)!=a.charAt(a.length()-i-1))
            return false;


      }
      return true;
   }
   public static void main(String args[])
   {
      Scanner scr = new Scanner(System.in);
      System.out.println("Enter a String :");
      String str = scr.nextLine();
      str = str.toLowerCase();
      String a="";
      for(int i=0; i<str.length(); i++)
      {
         if(str.charAt(i)>=97 && str.charAt(i)<=122)
            a+=str.charAt(i);
      }
      System.out.println(palindrome(a));
      scr.close();
   }}
```



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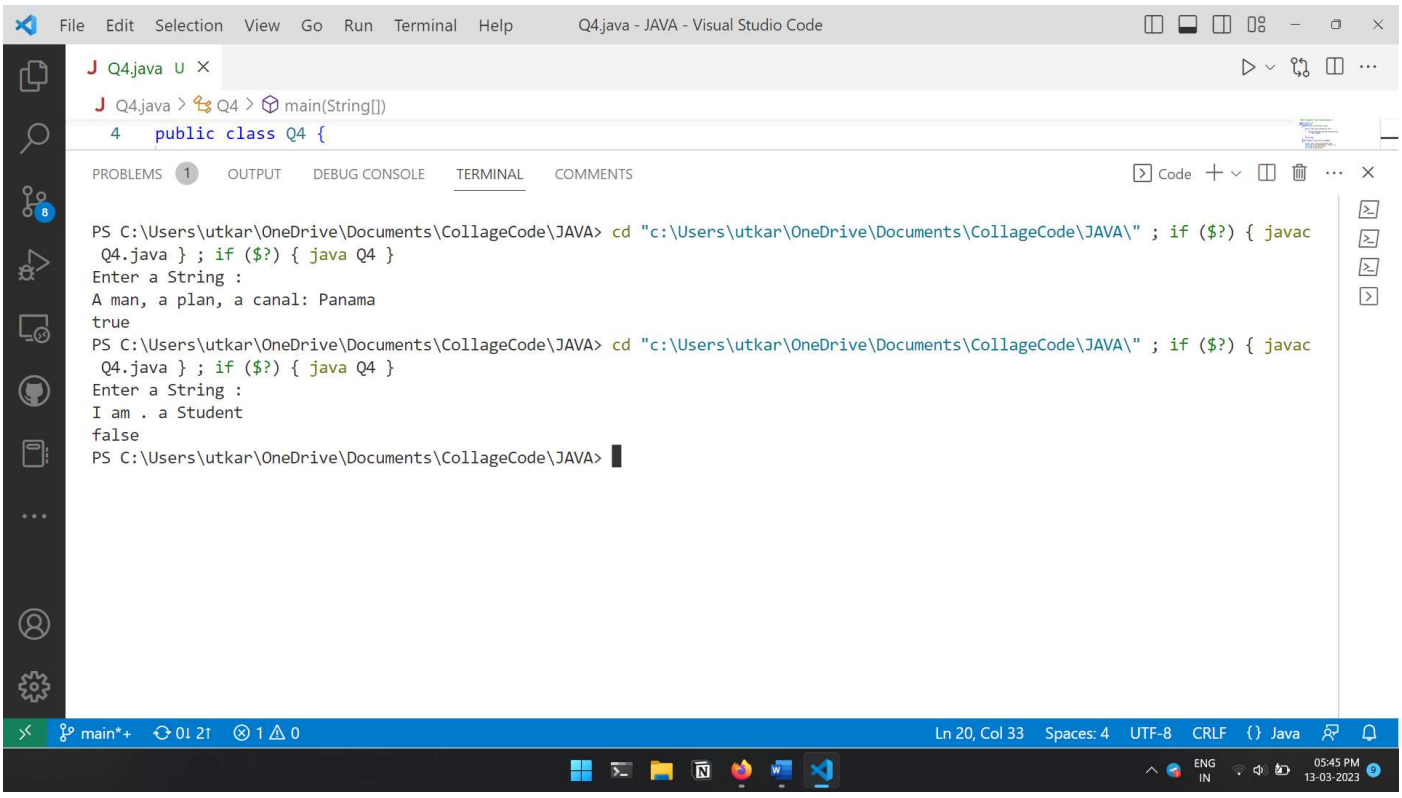
# Output



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# Source Code

```
//Write a program to check if any value appears at least twice in an array.
import java.util.*;
public class Q5 {

   static boolean twice(int arr[])
   {
      for(int i=0; i<arr.length-1; i++)
      {
         for(int j=i+1;j<arr.length;j++)
         {
            if(arr[i]==arr[j])
               return true;
         }
      }
      return false;
   }
   public static void main(String []args)
   {
      Scanner scr = new Scanner(System.in);
      System.out.println("Enter size of array");
      int n =scr.nextInt();
      int arr[]= new int [n];
      System.out.println("Enter Elements in array");
      for(int j=0;j<n;j++)
         {
            arr[j]=scr.nextInt();
         }
      System.out.println(twice(arr));
      scr.close();
   }
```



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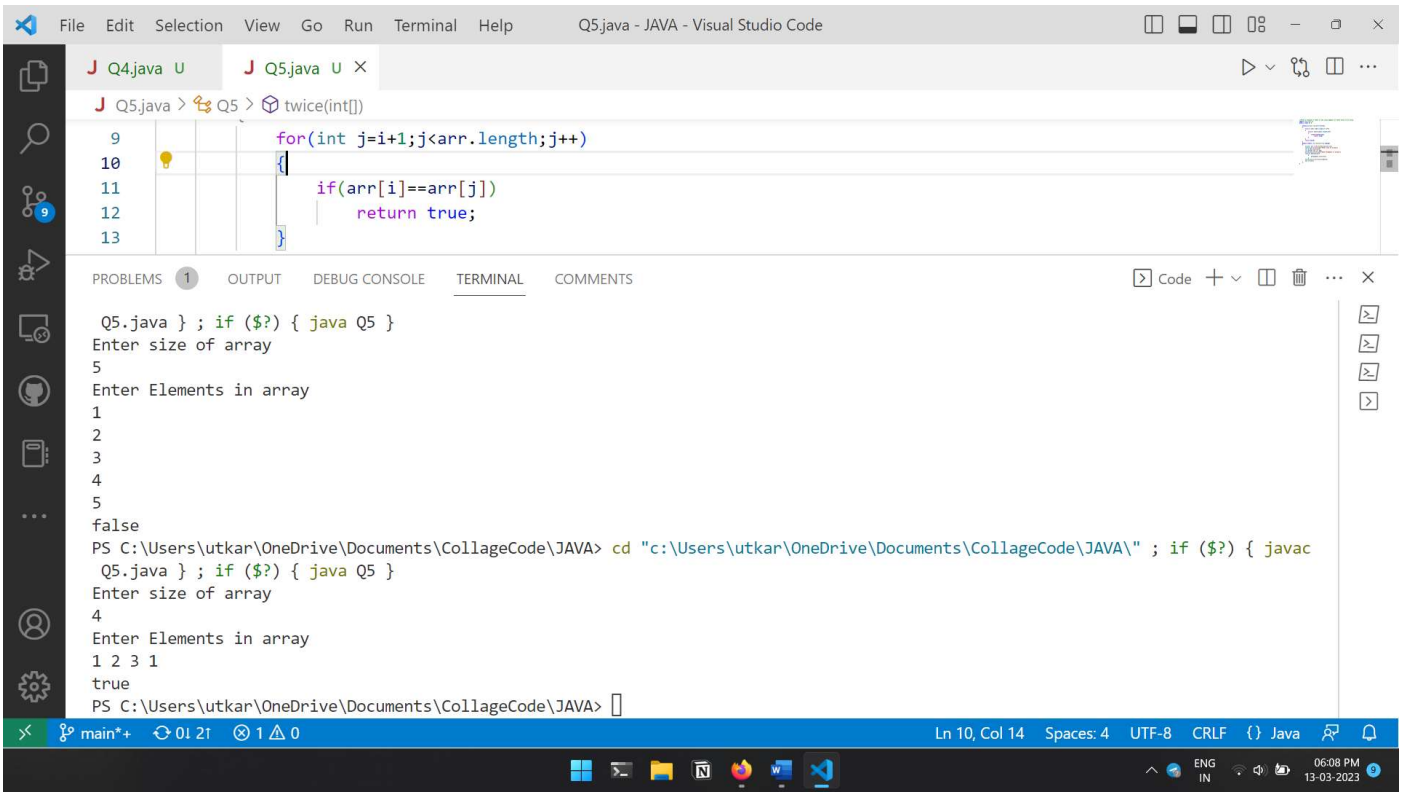
```
}
```

# Output



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# Source Code

```
//Write a program to sort the people according to their height.
import java.util.*;
public class Q6 {
   static void Sort(int[] arr , String []str) {
      int n = arr.length;
      int temp = 0;  String tmp="";
       for(int i=0; i < n; i++)
       {
         for(int j=1; j < (n-i); j++)
         {
            if(arr[j-1] > arr[j])
            {
               temp = arr[j-1];
               tmp = str[j-1];
               arr[j-1] = arr[j];
               str[j-1]=str[j];
               arr[j] = temp;
               str[j]=tmp;
            }

         }
      }

   }
   public static void main(String args[])
   {
      int n=0;
      Scanner scr = new Scanner(System.in);

      System.out.println("Enter the number of People :");
```



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```
        n=scr.nextInt();

        int height[]= new int[n];
        String name[]= new String[n];

        for(int i =0; i <n ; i++)
        {
           System.out.println("Enter Name of :"+i);
           name[i]=scr.next();
           System.out.println("Enter Height of "+i);
           height[i]=scr.nextInt();
        }
        Sort(height, name);
        for(int i =0; i <n ; i++)
        {
           System.out.println(name[i]);
        }
        scr.close();
    }
}
```



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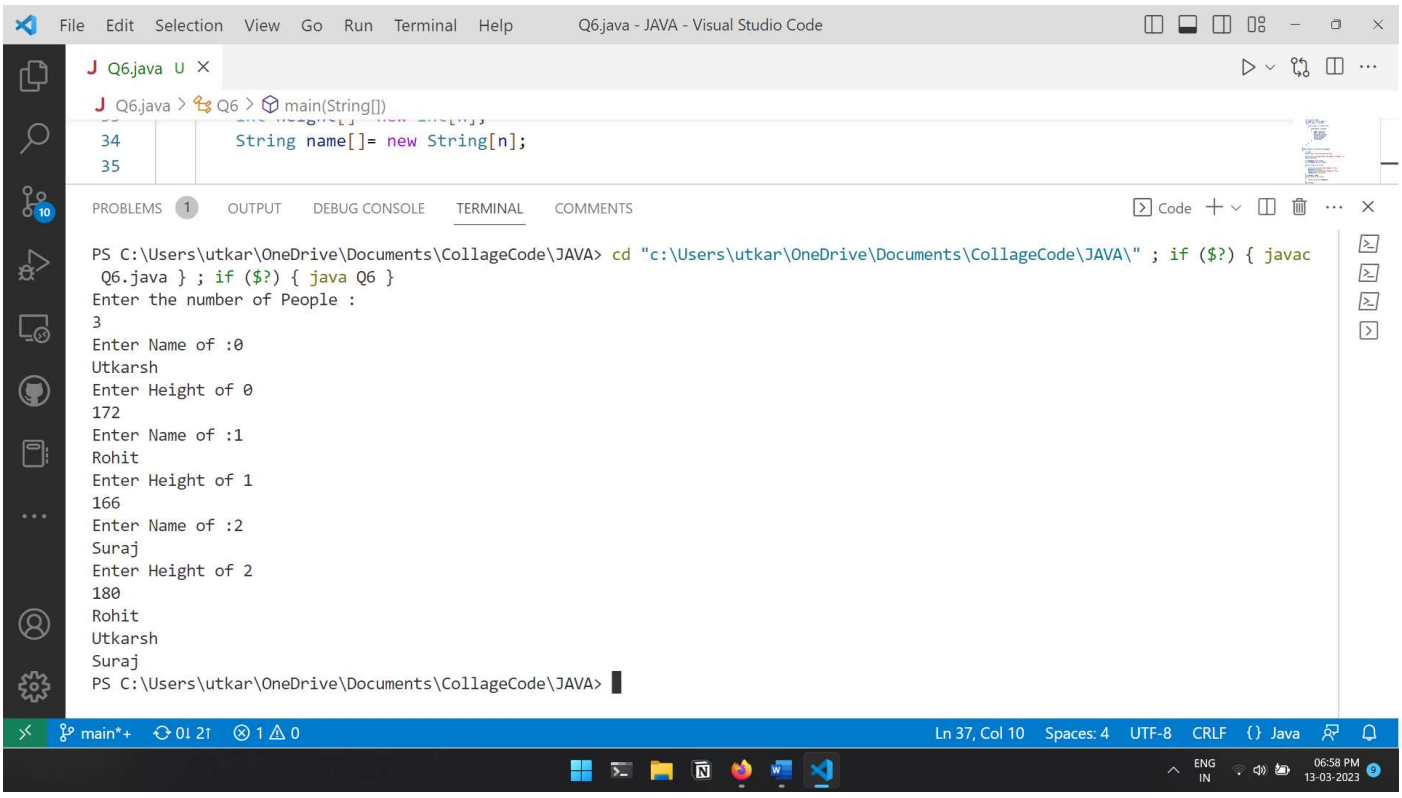
# Output



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# Source Code

```
//Write a program to count pairs of similar Strings
import java.util.Scanner;
public class Q7 {
   static boolean IsSimilar(String s1, String s2)
   {
      int arr1[]=new int[26];
      int arr2[]=new int[26];
      int i=0;int temp;
      while(i<s1.length()||i<s2.length())
      {
         if(i<s1.length())
         {
            temp = ((int)s1.charAt(i))-97;
            arr1[temp]++;
         }
         if(i<s2.length())
         {
            temp = ((int)s2.charAt(i))-97;
            arr2[temp]++;
         }
         i++;
      }
      for(i =0; i<26; i++)
      {
         if((arr1[i]>0&&arr2[i]==0)||(arr1[i]==0&&arr2[i]>0))
            return false;
      }
      return true;
   }
   public static void main(String[]args)
```



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```
    {
        Scanner scr = new Scanner(System.in);
        System.out.println("Enter the Size of array:");
        int n = scr.nextInt();
        String str[] = new String[n];
        System.out.println("Enter "+n+" Strings in array:\n");
        for(int i=0; i<n ;i++)
        {
            str[i]=scr.next();
        }

        int pairs=0;

        for(int i=0; i<n ;i++)
        {
            for(int j=i+1; j<n ;j++)
            {
                if(IsSimilar(str[i], str[j]))
                    pairs++;
            }
        }
        System.out.println("There are :"+pairs+" pairs");

        scr.close();
    }
}
```



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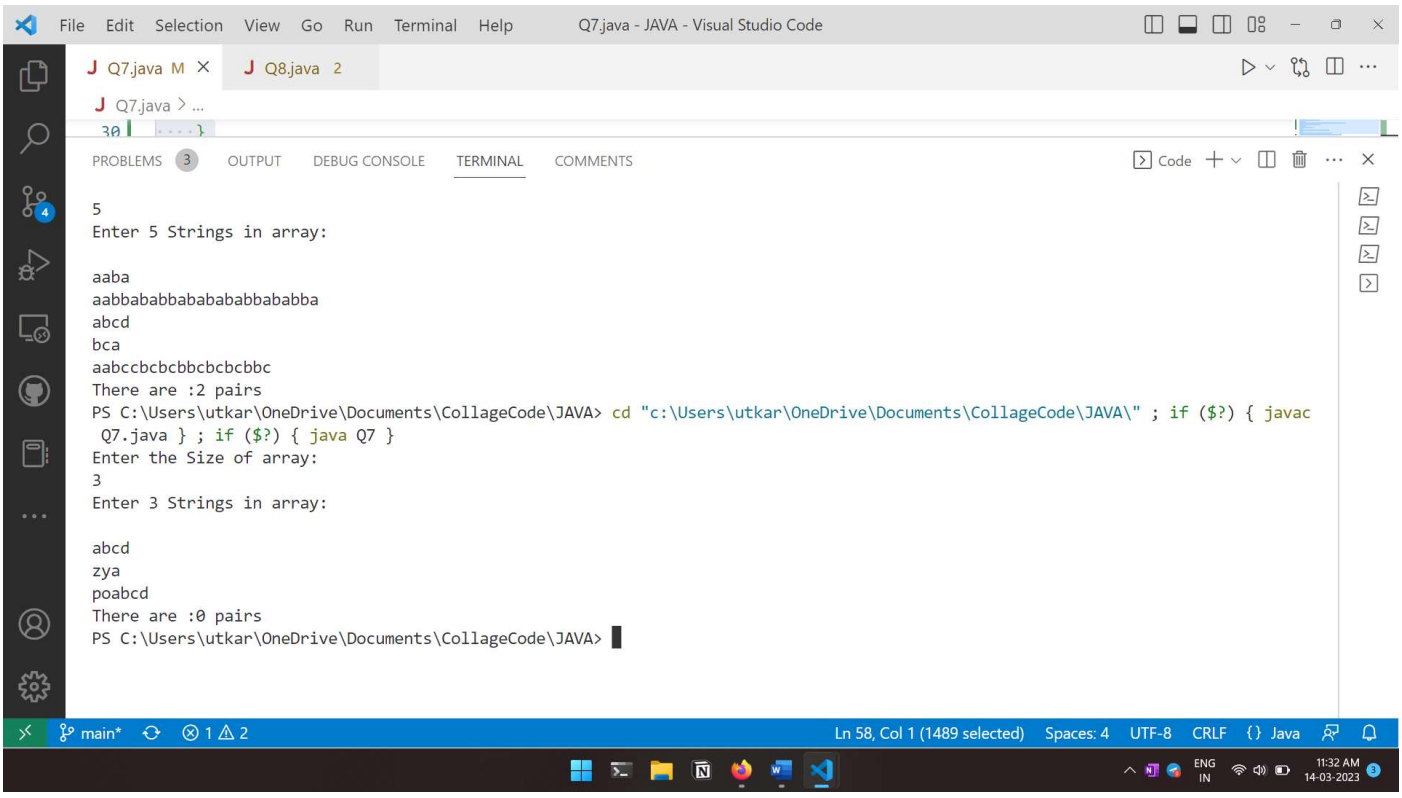
# Output



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# Source Code

```
//Write a program to find the missing number
import java.util.Scanner;
public class Q8 {
   public static void main(String[]args)
   {
      Scanner scr = new Scanner(System.in);
      System.out.println("Enter size of array");
      int n =scr.nextInt();
      int arr[]= new int [n];
      int sum=0;
      System.out.println("Enter Elements in array");
      for(int j=0;j<n;j++)
         {
            arr[j]=scr.nextInt();
            sum+=arr[j];
         }
      int len =arr.length;
      int ap = len*(len+1)/2;
      System.out.println("Missing number is : "+ (ap-sum));

      scr.close();
   }
}
```



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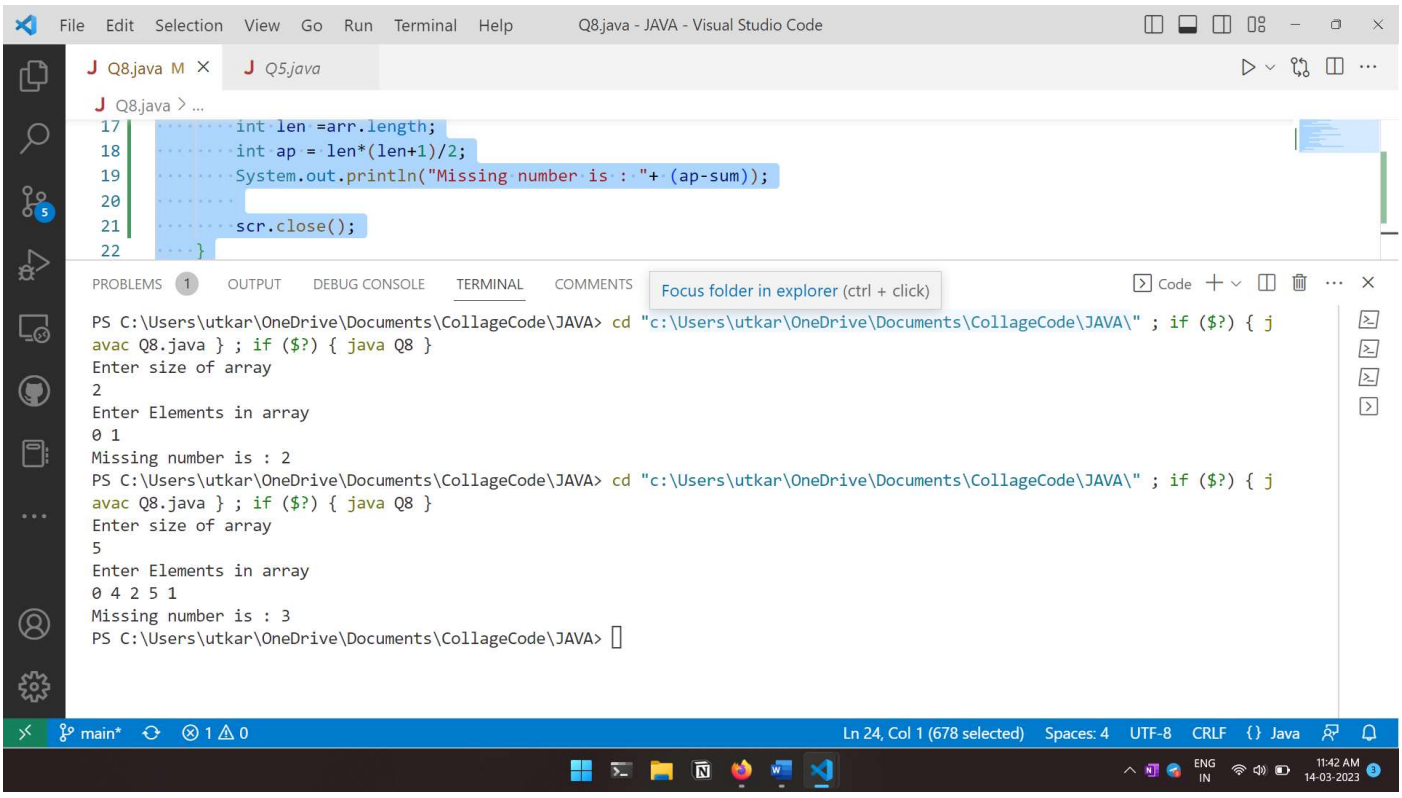
# Output



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# Source Code

/*Write a program to move all 0's to the end of it while maintaining the relative order of the non-zero elements*/

```
import java.util.Scanner;
public class Q9 {
   public static void main(String[]args)
   {
      Scanner scr = new Scanner(System.in);
      System.out.println("Enter size of array");
      int n =scr.nextInt();
      int arr[]= new int [n];
      System.out.println("Enter Elements in array");
      for(int j=0;j<n;j++)
         {
            arr[j]=scr.nextInt();
         }
      for(int i=0; i<n ; i++)
      {
         if(arr[i]==0)
         {
            for(int j=i;j<n-1;j++)
            {
               int temp=arr[j];
               arr[j]= arr[j+1];
               arr[j+1]=temp;
            }
            n--;
         }
      }
      System.out.print("Shifted array :\n");
```

```
        for(int j=0;j<arr.length;j++)
        {
            System.out.print(" "+arr[j]);
        }
        scr.close();
    }
}
```



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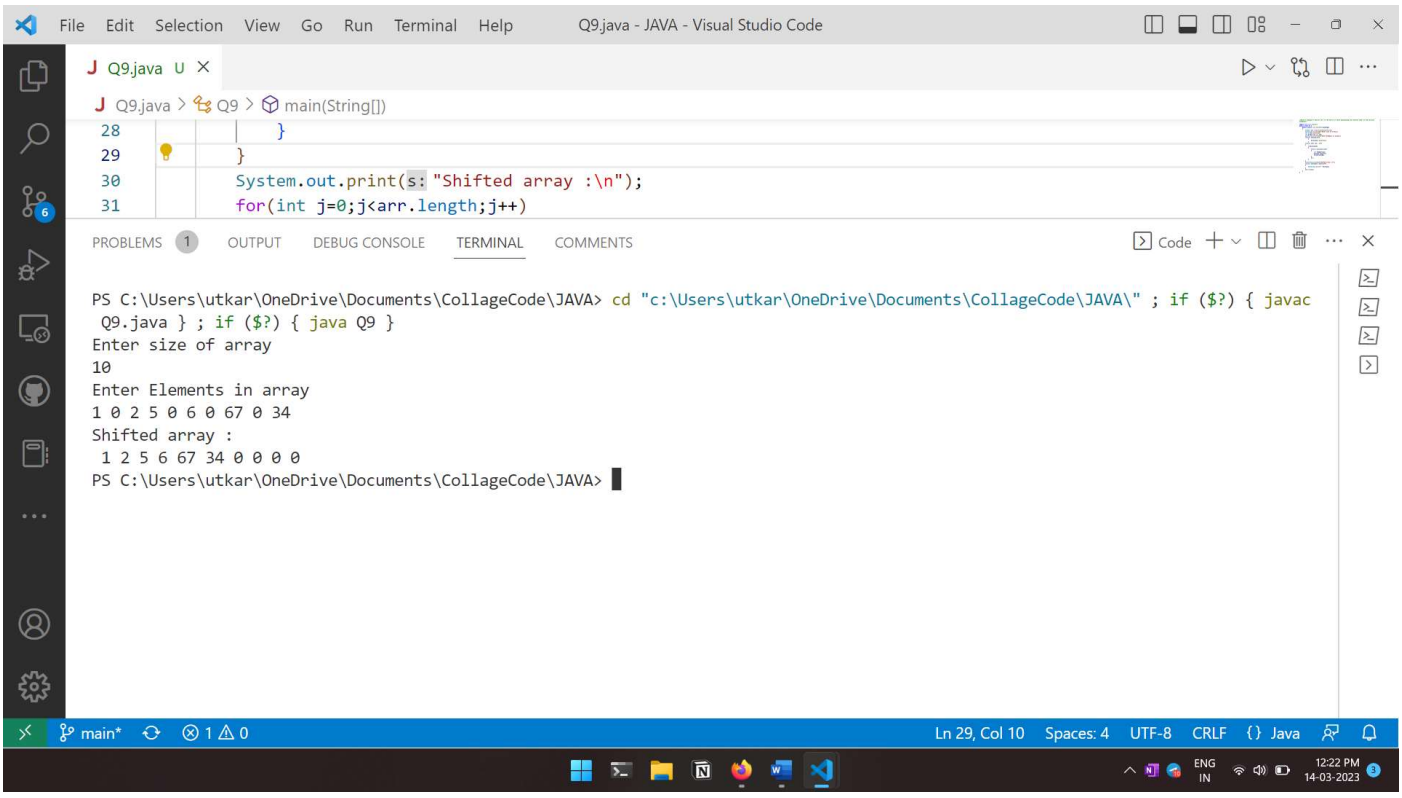
# Output



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