

ab1231da

9b | 231da
---|---|---|---|
1 2 3 1 da

in + sum = 0

1 + 2 + 3 + 1 \Rightarrow 7
ans

Find Sum in Alphanumeric String

Language: Java 7

```
1 import java.io.*;
2 import java.util.*;
3 import java.text.*;
4 import java.math.*;
5 import java.util.regex.*;
6
7 public class Solution {
8
9     public static void main(String[] args) {
10         /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should be
11         Scanner sc = new Scanner(System.in);
12         String str = sc.next();
13         System.out.println(addDigits(str));
14     }
15     public static int addDigits(String str){
16         int sum=0;
17         for(int i=0;i<str.length();i++){
18             char ch = str.charAt(i);
19             if(Character.isDigit(ch)){
20                 int val = Character.getNumericValue(ch);
21                 sum+=val;
22             }
23         }
24         return sum;
25     }
26 }
```

$$\frac{1+i}{1+i}$$

$$1 + i$$

com

$$i^2 = -1$$

Real + Imaginary i

$$i^2 = -1$$

$$q = ①$$

$$b = 1$$

$$c = 1$$

$$d = 1$$

$$(a+bi) * (c+di);$$

1)

$$(a \times c) + (a \times d)i + (b \times c)i + (b \times d)i^2$$

$$\underbrace{(a \times c)}_{\text{real}} + \underbrace{(a \times d)i + (b \times c)i}_{\text{imaginary}} + \underbrace{(b \times d)i^2}_{\text{real}}$$

$$(a \times c - b \times d) + (a \times d + b \times c)i$$

$$\frac{(1 \times 1 - 1 \times 1)}{2} + \frac{(1 \times 1 + 1 \times 1)}{2}i$$

aaabbccdsa

aaabbccdsa
① ① ①
9 3 2 2 1 1 1
9 3 2 2 1 1 1

int i = 0

stringBuffer
i = 0

while (i < n) {

char ch = s[i]

int count = 0

while (i < n && ch == s[i])

{

count++

}

s

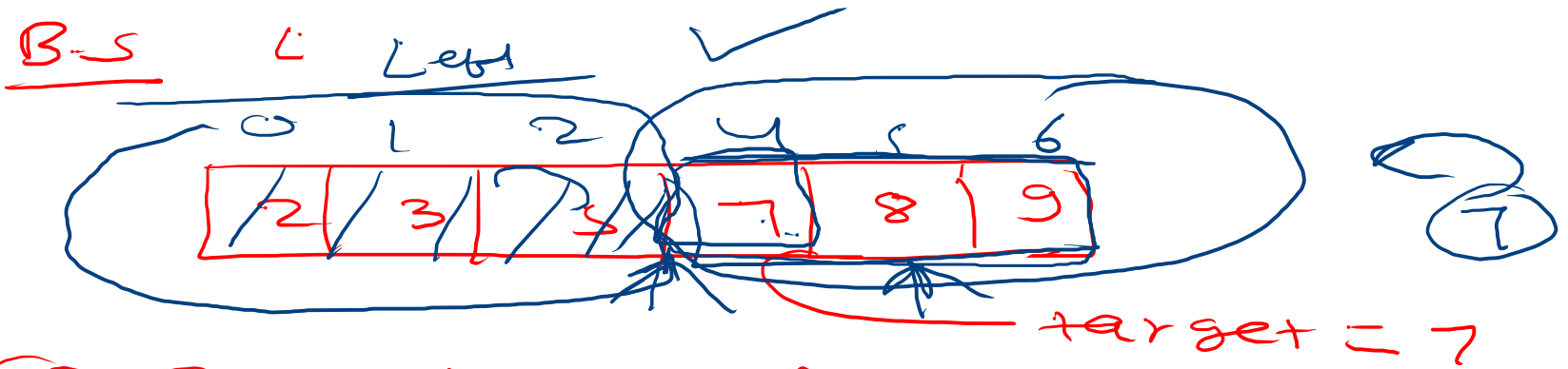
Compress The String

```
1 import java.io.*;
2 import java.util.*;
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         /* Enter your code here. Read input from STDIN. Print output to STDOUT */
8         Scanner sc = new Scanner(System.in);
9         String str = sc.next();
10        compress(str);
11    }
12    public static void compress(String str){
13        int n = str.length();
14        StringBuffer sb = new StringBuffer();
15        int i=0;
16        while(i<n){
17            char ch = str.charAt(i);
18            int count=0;
19            while(i<n && ch==str.charAt(i)){
20                count++;
21                i++;
22            }
23            sb.append(ch);
24            if(count>1){
25                sb.append(count);
26            }
27        }
28        System.out.println(sb);
29    }
30 }
```

Multiply Complex Number

Language: Java 15

```
1 import java.io.*;
2 import java.util.*;
3 import java.text.*;
4 import java.math.*;
5 import java.util.regex.*;
6
7 public class Solution {
8
9     public static void main(String[] args) {
10         /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should be r
11         Scanner sc = new Scanner(System.in);
12         String str = sc.next();
13         String str1 = sc.next();
14
15         System.out.println(multiply(str,str1));
16     }
17     public static String multiply(String str,String str1){
18         int a = Integer.parseInt(str.substring(0,str.indexOf('+')));
19         int b = Integer.parseInt(str.substring(str.indexOf('+')+1,str.length()-1));
20         int c = Integer.parseInt(str1.substring(0,str1.indexOf('+')));
21         int d = Integer.parseInt(str1.substring(str1.indexOf('+')+1,str1.length()-1));
22
23         return ""+(a*c - b*d)+"+"+(a*d+b*c)+"i";
24         // return "yash";
25
26     }
27 }
28 }
```



① Sorted Array

- Increasing
- Decreasing

$O(n)$

$$0 + 2i$$

$$1 + 1i$$

$$6 + 17i$$

+1, length 11-1

$$1 + 1i$$

$$12 + 3i$$

$$12$$

$$(0, 3)$$

$$(0, 1)$$

$$12$$

Integer