Revision.

functions.

- indexOf() → first occ.
- split(" ")

  ["___", "___", "__"]

- trim() → remove trailing & leading space.

Substring.

s → abcd

$n=4$

$4(5)/2 = \boxed{10}$

✓

a b c d

ab bc cd

abc bcd

abcd

Sub-array.

1 2 3 4 5

$t = n(n+1)/2$

$= \boxed{15}$

1 2 3 4 5

1 2 2 3 3 4 4 5

1 2 3 2 3 4 3 4 5

1 2 3 4 2 3 4 5

1 2 3 4 5

Substring. ⤳ Print all substring.

" a b c d "

0 1 2 3

${}_0a_0$

${}_0ab_1$

${}_0abc_2$

${}_0abcd_3$

${}_1b_1$

${}_1bc_2$

${}_1bcd_3$

${}_2c_2$

${}_2cd_3$

${}_3d_3$

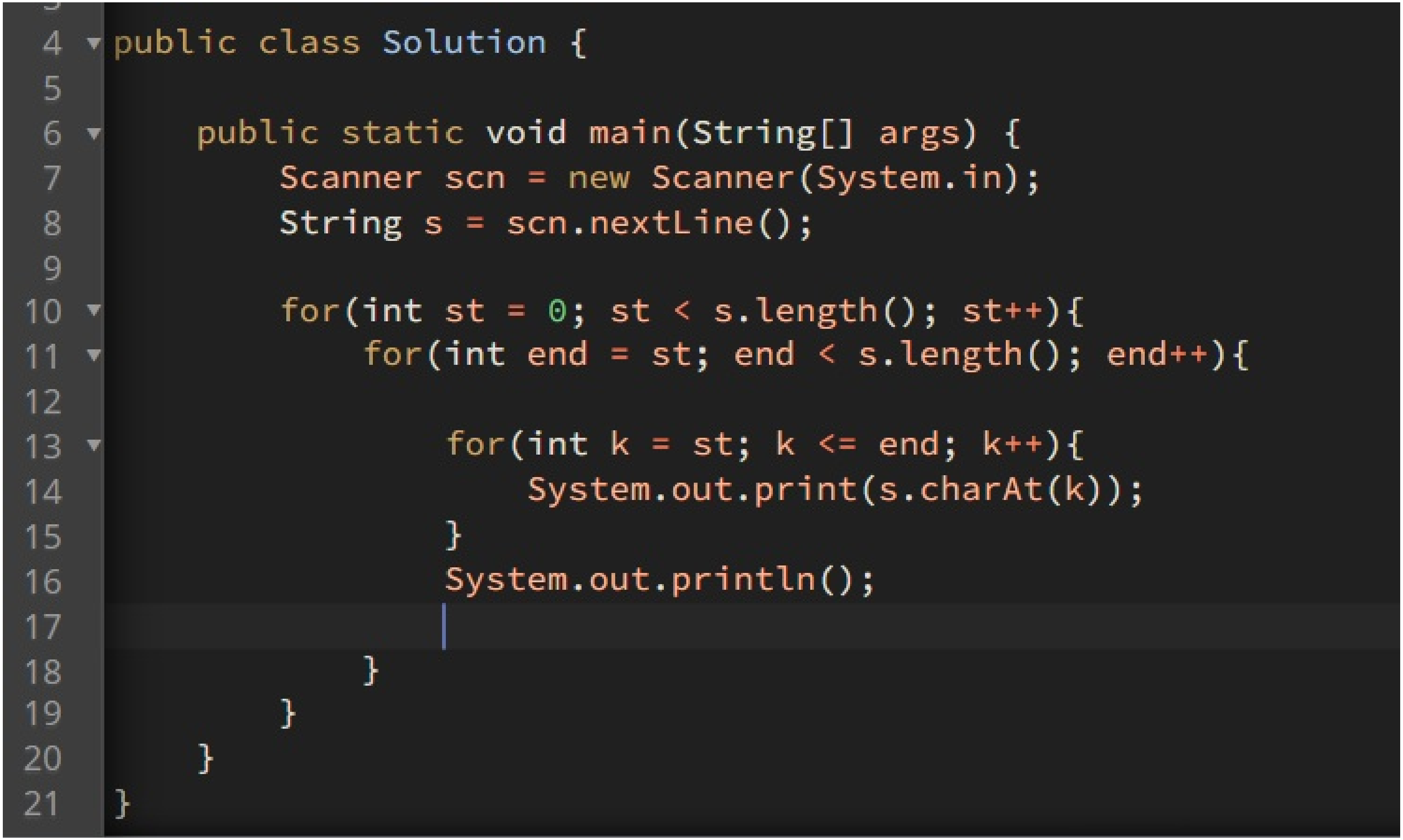
st. pt	end.
0	Φ 1 2 3
1	1 2 3
2	2 3
3	3

s , e

[1 , 3]

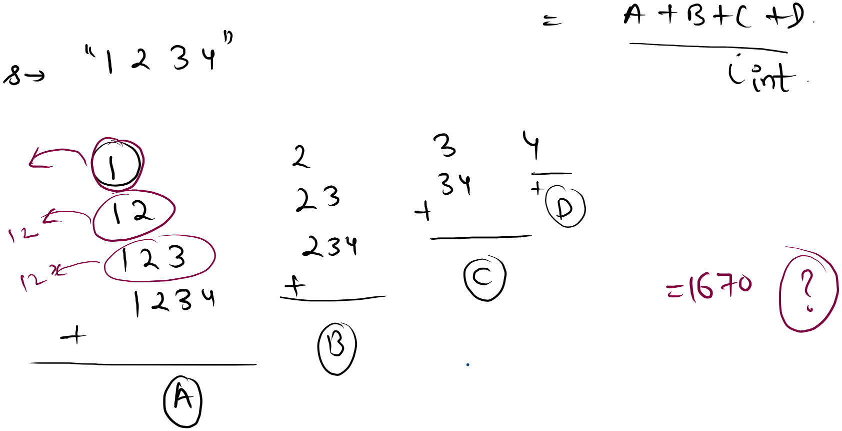
↓

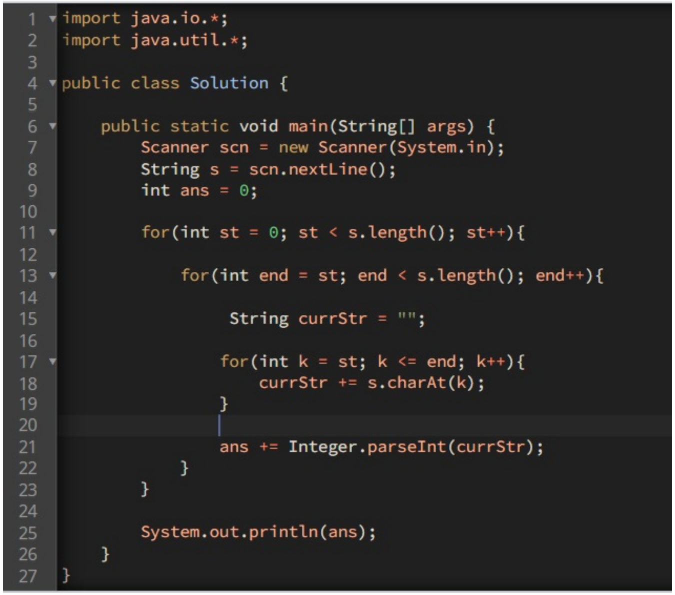
bcd.



```java
public class Solution {

    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        String s = scn.nextLine();

        for(int st = 0; st < s.length(); st++){
            for(int end = st; end < s.length(); end++){

                for(int k = st; k <= end; k++){
                    System.out.print(s.charAt(k));
                }
                System.out.println();

            }
        }
    }
}
```

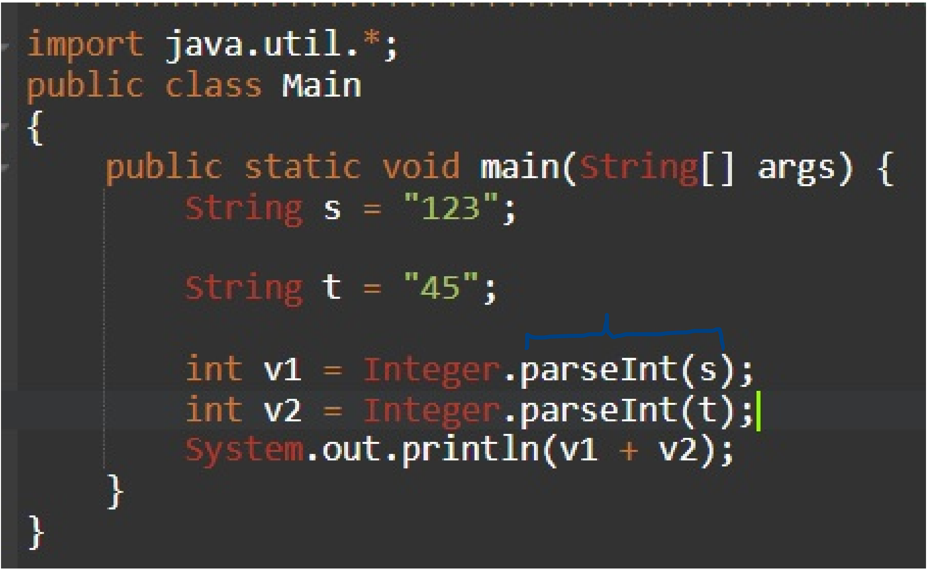
Sum of All Substrings





```
import java.io.*;
import java.util.*;

public class Solution {

    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        String s = scn.nextLine();
        int ans = 0;

        for(int st = 0; st < s.length(); st++){

            for(int end = st; end < s.length(); end++){

                 String currStr = "";

                for(int k = st; k <= end; k++){
                    currStr += s.charAt(k);
                }

                ans += Integer.parseInt(currStr);
            }
        }

        System.out.println(ans);
    }
}
```

ParseInt.



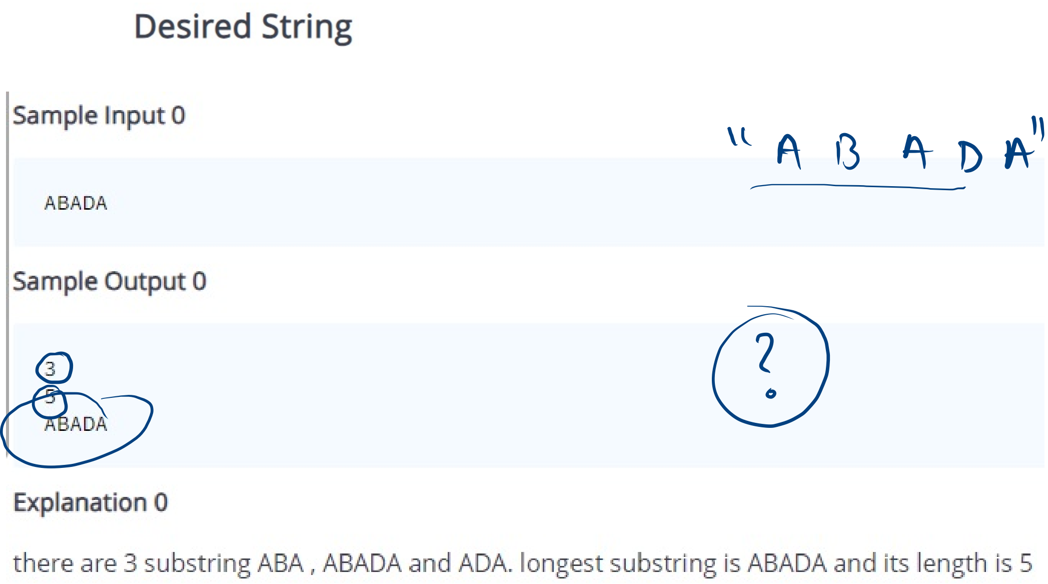
```
import java.util.*;
public class Main
{
    public static void main(String[] args) {
        String s = "123";

        String t = "45";

        int v1 = Integer.parseInt(s);
        int v2 = Integer.parseInt(t);
        System.out.println(v1 + v2);
    }
}
```

valueOf

string → Integer

parseInt

string → int . ✓



Desired String

Sample Input 0

```
ABADA
```

Sample Output 0

```
3
5
ABADA
```

Explanation 0

there are 3 substring ABA , ABADA and ADA. longest substring is ABADA and its length is 5

"A B A D A"

?

any ss

A..... A

3

5

ABADA

n=5

A B A D A

A .... A

A

A B

A B A

A B A D

A B A D A

n=5

B

B A

B A D

B A D A

A

A D

A D A

D

D A

A

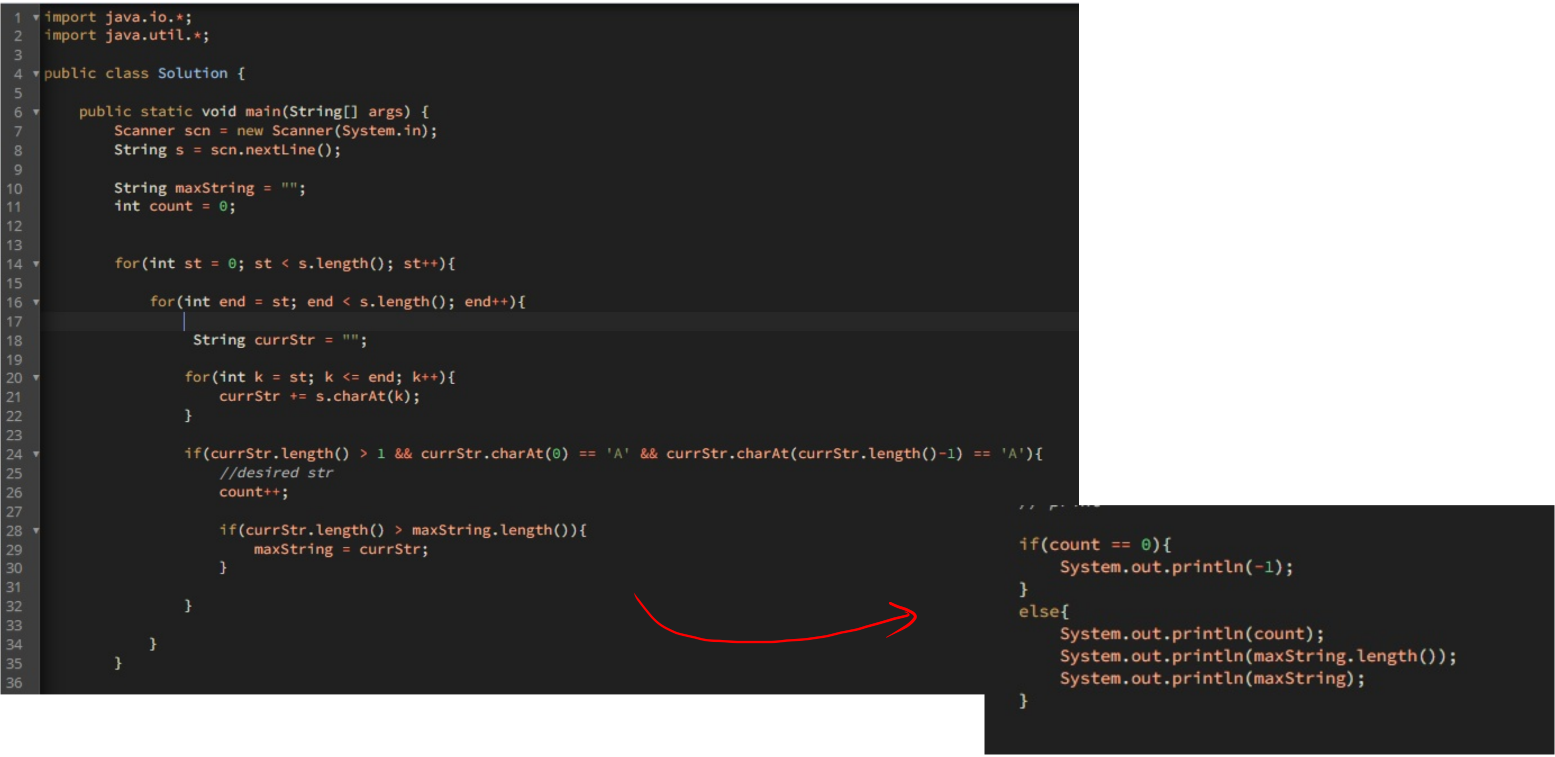
if(len > 1 and

s[0] = 'A'

and

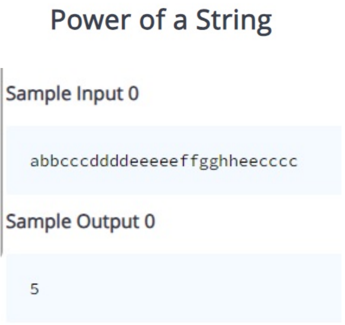
s[len] = 'A'

C++



```java
import java.io.*;
import java.util.*;

public class Solution {

    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        String s = scn.nextLine();

        String maxString = "";
        int count = 0;


        for(int st = 0; st < s.length(); st++){

            for(int end = st; end < s.length(); end++){

                 String currStr = "";

                for(int k = st; k <= end; k++){
                    currStr += s.charAt(k);
                }

                if(currStr.length() > 1 && currStr.charAt(0) == 'A' && currStr.charAt(currStr.length()-1) == 'A'){
                    //desired str
                    count++;

                    if(currStr.length() > maxString.length()){
                        maxString = currStr;
                    }

                }

            }
        }

```

```java
        if(count == 0){
            System.out.println(-1);
        }
        else{
            System.out.println(count);
            System.out.println(maxString.length());
            System.out.println(maxString);
        }
```



Power of a String

Sample Input 0

```
abbcccddddeeeeeffgghheecccc
```

Sample Output 0

```
5
```

$\boxed{a}$ a b b c c c d d d d e e e e e f f g g h h c e e e e e

i

evaluat

count of same ch.

$C = \cancel{1}$ 6

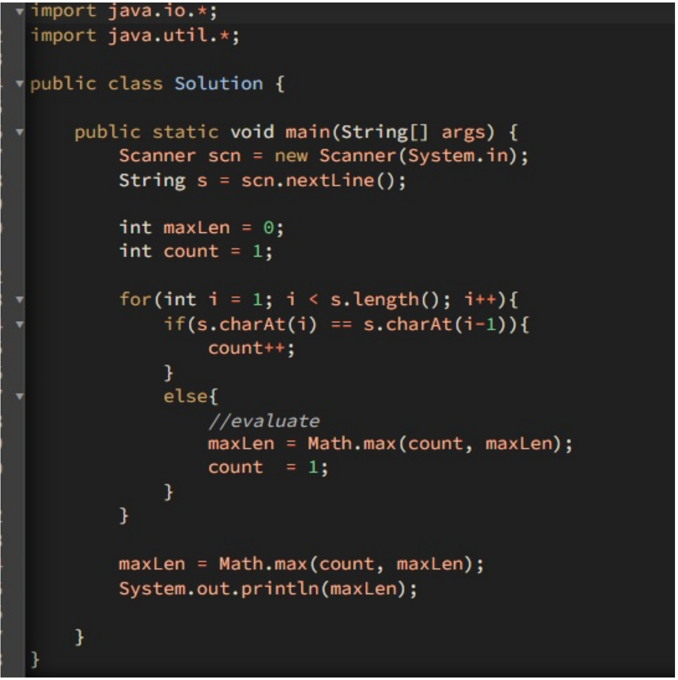
maxLen $= \cancel{0}$ $\cancel{2}$ $\cancel{2}$ $\cancel{3}$ $\cancel{4}$ $\cancel{5}$ 6

if → $(s[i] == s[i-1])$ c++;

else $(\ s[i] \neq s[i-1])$ → evaluate.

maxLen = max (maxLen, c)

c = 1



```java
import java.io.*;
import java.util.*;

public class Solution {

    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        String s = scn.nextLine();

        int maxLen = 0;
        int count = 1;

        for(int i = 1; i < s.length(); i++){
            if(s.charAt(i) == s.charAt(i-1)){
                count++;
            }
            else{
                //evaluate
                maxLen = Math.max(count, maxLen);
                count  = 1;
            }
        }

        maxLen = Math.max(count, maxLen);
        System.out.println(maxLen);

    }
}
```