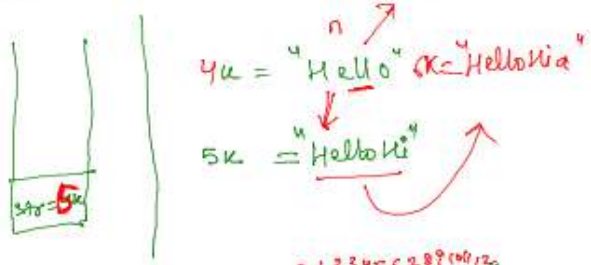
StringBuilder

String Str = "Hello";

Str = Str + "Hi"; O(n²)

Str = "Hello" + "Hi"



StringBuilder Str = "stringbuilder"

0 1 2 3 4 5 6 7 8 9 10 11 12

1. charAt() = Str.charAt(3) = i
2. length() = str.length() = 13
3. insert() = Str.insert(4, "ab") = "striabngbuilder";
4. delete() = str.delete(2, 4); = "";
5. replace() = Str.replace(2, 4, "Str") =
6. reverse() = str.reverse() = "redlinbgnirts";
7. indexOf() = str.indexOf("ing") = 3
8. append() = Str.append("abc") → stringbuilderabc

```
public static String ABC( ){
    StringBuilder Str = new StringBuilder();
    return Str.toString();
}

String str = "abcd";
[ StringBuilder sb = new StringBuilder(str); ]
```

Question)

Palindrome

↳ A word that is exactly similar from both ends.

String str = "abcdcba";


```
if( str.charAt(st) != str.charAt(end)){
    "not palindrome";
    return;
}

Sysо("palindrome");
```

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

    int st =0;
    int en = str.length()-1;

    while(st<en){
        if(str.charAt(st)!=str.charAt(en)){
            System.out.println("Not a Palindrome");
            return;
        }

        st++;
        en--;
    }

    System.out.println("Palindrome");
    /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your cla
}
```

Question substring

↳ continuous part of larger string

"abcdefghi"

↳ "defg", "cdghi" → e missing from now

str = "0 1 2 3 4 5" abcdef

str.substring(2);

⇓

cdef

str.substring(2,5)

⇓

cde

string = "0 1 2 3 4" abcde

i I I I I J

```
for(int i=0; i<str.length(); i++){
    for(int j=i+1; j<=str.length(); j++){
        String sub = str.substring(i, j);
        0 2
        sysо (sub);
    }
}
```

a
a b
a b c
a b cd
a b cde

```
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    String str = scn.nextLine();
    for(int i=0;i<str.length();i++){
        for(int j = i+1;j<=str.length();j++){
            String ros = str.substring(i,j);
            System.out.println(ros);
        }
    }
    /* Enter your code here. Read input from STDIN. Print output to STDOUT.
}
```

Question — find sum of all substring

↳ find all substring
↳ convert into int;
↳ sum & print;

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

    int sum =0;

    for(int i =0;i<str.length();i++){
        for(int j = i+1;j<=str.length();j++){
            sum += Integer.parseInt(str.substring(i,j));
        }
    }

    System.out.println(sum);
    /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your cl
```

Question

str = "ABADA"

condition → A ↔ A

count = 3

maxlength = 5

substring = ABADA

ABA

ABADA

ADA

```
Scanner scn = new Scanner(System.in);
String str = scn.nextLine();
int count =0;
int maxlength=0;
String sub ="";

for(int i=0;i<str.length();i++){
    if(str.charAt(i)=='A'){
        for(int j = i+1;j<str.length();j++){
            if(str.charAt(j)=='A'){
                count++;
                int len = j-i+1;

                if(len>maxlength){
                    maxlength= len;
                    sub = str.substring(i,j+1);
                }
            }
        }
    }
}

if(count==0){
    System.out.println("-1");
    return;
}
System.out.println(count);
System.out.println(maxlength);
System.out.println(sub);

/* Enter your code here. Read input from STDIN. Print output to STDOU
}
```

count = ~~0 1 2~~ 3

maxlen = ~~0 3~~ 5

sub = "ABADA"

"0 1 2 3 4"

"ABADA"

~~i i i~~

~~J J J J J~~ 5

len = ~~3~~ 5

str.substring(i, j+1);

ABA

ADA

A A