### String-1 > makeOutWord

prev | next | chance

Given an "out" string length 4, such as "<<>>", and a word, return a new string where the word is in the middle of the out string, e.g. "<<word>>". Note: use str.substring(i, j) to extract the String starting at index i and going up to but not including index j.

```
\label{eq:makeOutWord("<<>>", "Yay") $\rightarrow$ "<<Yay>>" $makeOutWord("<<>>", "WooHoo") $\rightarrow$ "<<WooHoo>>" $makeOutWord("[[]]", "word") $\rightarrow$ "[[word]]" $
```

```
...Save, Compile, Run (ctrl-enter)
```

```
public String makeOutWord(String out, String word) {
  return out.substring(0,2)+word + out.substring(2);
```

Expected	Run		
$\label{eq:makeOutWord} \begin{array}{l} makeOutWord("<<>>", "Yay") \rightarrow " \\ <>" \end{array}$	"< <yay>&gt;"</yay>	OK	
$eq:makeOutWord("<<>>", "WooHoo") $\rightarrow$ " $$ <>" $$$	" < <woohoo>&gt;"</woohoo>	OK	
$makeOutWord("[[]]", "word") \to "[[word]]"$	"[[word]]"	oĸ	
makeOutWord("HHoo", "Hello") → "HHHellooo"	"HHHellooo"	OK	
$makeOutWord("abyz","YAY") \to "abYAYyz"$	"abYAYyz"	OK	
other tests		ок	



## String-1 > nTwice

prev | next | chance

Given a string and an int n, return a string made of the first and last n chars from the string. The string length will be at least n.

```
\label{eq:nTwice} \begin{split} &\mathsf{nTwice}(\mathsf{"Hello"},\,2) \to \mathsf{"Helo"} \\ &\mathsf{nTwice}(\mathsf{"Chocolate"},\,3) \to \mathsf{"Choate"} \\ &\mathsf{nTwice}(\mathsf{"Chocolate"},\,1) \to \mathsf{"Ce"} \end{split}
```



```
public String nTwice(String str, int n) {
 return str.substring(0, n) + str.substring(str.length() - n);
```

Expected	Run		
nTwice("Hello", 2) → "Helo"	"Helo"	ок	
nTwice("Chocolate", 3) $\rightarrow$ "Choate"	"Choate"	ок	
nTwice("Chocolate", 1) $\rightarrow$ "Ce"	"Ce"	ок	
nTwice("Chocolate", $0$ ) $\rightarrow$ ""	***	ок	
nTwice("Hello", 4) → "Hellello"	"Hellello"	ок	
nTwice("Code", 4) $\rightarrow$ "CodeCode"	"CodeCode"	ок	
nTwice("Code", 2) → "Code"	"Code"	ок	
other tests		ок	



Java

**Python** 

### String-1 > makeTags

prev | next | chance

The web is built with HTML strings like "<is>Yay</is" which draws Yay as italic text. In this example, the "!" tag makes <>> and </i> which surround the word "Yay". Given tag and word strings, create the HTML string with tags around the word, e.g. "<isYay</i>".

 $\label{eq:makeTags("i", "Yay") $\rightarrow$ "<i>Yay</i>" makeTags("i", "Hello") $\rightarrow$ "<i>Hello</i>" makeTags("cite", "Yay") $\rightarrow$ "<cite>Yay</cite>"$ 



	ng makeTags				
return "<	"+ tag +">"	+ word +	"<"+ "/"+t	ag + ">";	

Expected	Run
"i", "Yay") → "	" <i>Yay</i> "

Expected	Rufi		
makeTags("i", "Yay") → " <i>Yay</i> "	" <i>Yay</i> "	OK	
$\begin{array}{l} makeTags("i", "Hello") \to " \\ < i \! > \! Hello < \! / i \! > " \end{array}$	" <i>Hello</i> "	oĸ	
makeTags("cite", "Yay") → " <cite>Yay</cite> "	" <cite>Yay</cite> "	oĸ	
$\begin{array}{l} {\sf makeTags("address", "here")} \rightarrow " \\ {\sf here"} \end{array}$	" <address>here</address> "	OK	
$\begin{array}{l} makeTags("body","Heart") \to " \\ <\!body\!>\!Heart\!<\!/body\!>\!" \end{array}$	" <body>Heart</body> "	OK	
$makeTags("i",\ "i") \to "<\!\!i\!\!>\!\!i<\!\!/i\!\!>"$	" <i>i</i> "	ΟK	
makeTags("i", "") → " <i></i> "	" <i></i> "	ок	
other tests		ок	



prev | next | chance

Given a string of even length, return the first half. So the string "WooHoo" yields "Woo".

$$\begin{split} & \text{firstHalf}(\text{"WooHoo"}) \rightarrow \text{"Woo"} \\ & \text{firstHalf}(\text{"HelloThere"}) \rightarrow \text{"Hello"} \\ & \text{firstHalf}(\text{"abcdef"}) \rightarrow \text{"abc"} \end{split}$$

Go ...Save, Compile, Run (ctrl-enter)

```
public String firstHalf(String str) {
  return str.substring(0,str.length()/2);
}
```

Expected	Run		
$firstHalf("WooHoo") \to "Woo"$	"Woo"	ок	
$firstHalf("HelloThere") \to "Hello"$	"Hello"	ок	
$firstHalf("abcdef") \to "abc"$	"abc"	ок	
$firstHalf("ab") \to "a"$	"a"	ок	
$firstHalf("") \to ""$	""	ок	
$firstHalf("0123456789") \rightarrow "01234"$	"01234"	ок	
$firstHalf("kitten") \to "kit"$	"kit"	ок	
other tests	·	ок	



### String-1 > nonStart

prev | next | chance

Given 2 strings, return their concatenation, except omit the first char of each. The strings will be at least length 1.

 $\begin{array}{ll} \text{nonStart}("\text{Hello"}, "\text{There"}) \rightarrow "\text{ellohere"} \\ \text{nonStart}("\text{java"}, "\text{code"}) \rightarrow "\text{avaode"} \\ \text{nonStart}("\text{shotl"}, "\text{java"}) \rightarrow "\text{hotlava"} \end{array}$ 

Go ....Save, Compile, Run (ctrl-enter)

```
public String nonStart(String a, String b) {
   return a.substring(1)+b.substring(1);
}
```

Expected	Run		
$nonStart("Hello","There") \to "ellohere"$	"ellohere"	οк	
nonStart("java", "code") → "avaode"	"avaode"	ок	
nonStart("shotl", "java") → "hotlava"	"hotlava"	ок	
nonStart("ab", "xy") → "by"	"by"	ок	
nonStart("ab", "x") → "b"	"Ь"	ок	
nonStart("x", "ac") → "c"	"c"	ок	
nonStart("a", "x") → ""	***	ок	
nonStart("kit", "kat") → "itat"	"itat"	ок	
nonStart("mart", "dart") → "artart"	"artart"	ок	
other tests		ок	



next | chance

## String-1 > theEnd

prev | next | chance

Given a string, return a string length 1 from its front, unless **front** is false, in which case return a string length 1 from its back. The string will be non-empty.

theEnd("Hello", true)  $\rightarrow$  "H" theEnd("Hello", false)  $\rightarrow$  "o" theEnd("oh", true)  $\rightarrow$  "o"

Go ...Save, Compile, Run (ctrl-enter)

```
public String theEnd(String str, boolean front) {
   if(front)
   return str.substring(0,1);
   return str.substring (str.length()-1);
}
```

Expected	Run		
theEnd("Hello", true) → "H"	"H"	ок	
theEnd("Hello", false) → "o"	"o"	ок	
theEnd("oh", true) → "o"	"o"	ок	
theEnd("oh", false) → "h"	"h"	ок	
theEnd("x", true) → "x"	"x"	ок	
$theEnd("x", false) \rightarrow "x"$	"x"	ок	
theEnd("java", true) → "j"	"j"	ок	
theEnd("chocolate", false) → "e"	"e"	ок	
theEnd("1234", true) → "1"	"1"	ок	
theEnd("code", false) → "e"	"e"	ок	
other tests		ок	



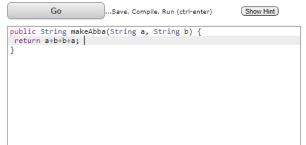
Java

Python

# String-1 > makeAbba prev | next | chance

Given two strings, a and b, return the result of putting them together in the order abba, e.g. "Hi" and "Bye" returns "HiByeByeHi".

makeAbba("Hi", "Bye") → "HiByeByeHi" makeAbba("Yo", "Alice") → "YoAliceAliceYo" makeAbba("What", "Up") → "WhatUpUpWhat"



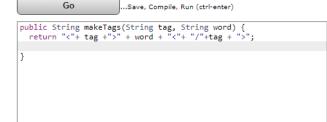
Expected	Run		
makeAbba("Hi", "Bye") → "HiByeByeHi"	"HiByeByeHi"	ок	
makeAbba("Yo", "Alice") → "YoAliceAliceYo"	"YoAliceAliceYo"	ок	
makeAbba("What", "Up") → "WhatUpUpWhat"	"WhatUpUpWhat"	OK	
makeAbba("aaa", "bbb") → "aaabbbbbbaaa"	"aaabbbbbbbaaa"	ок	
makeAbba("x", "y") → "xyyx"	"xyyx"	ок	
makeAbba("x", "") → "xx"	"xx"	ОК	
makeAbba("", "y") → "yy"	"уу"	ОК	
makeAbba("Bo", "Ya") → "BoYaYaBo"	"BoYaYaBo"	ок	
makeAbba("Ya", "Ya") → "YaYaYaYa"	"YaYaYaYa"	ок	
other tests		ок	



## String-1 > makeTags prev | next | chance

The web is built with HTML strings like "<i>Yay</i>" which draws Yay as italic text. In this example, the "i" tag makes <!> and </!> which surround the word "Yay". Given tag and word strings, create the HTML string with tags around the word, e.g. "<i>Yay</i>".

 $\label{eq:makeTags("i", "Yay")} \rightarrow "<i>Yay</i>" \\ makeTags("i", "Hello") \rightarrow "<i>Hello</i>" \\ makeTags("cite", "Yay") \rightarrow "<cite>Yay</cite>" \\ \end{cases}$ 



Expected	Run		
makeTags("i", "Yay") → " <i>Yay</i> "	" <i>Yay</i> "	ок	
makeTags("i", "Hello") → " <i>&gt;Hello</i> "	" <i>Hello</i> "	ОК	
makeTags("cite", "Yay") → " <cite>Yay</cite> "	" <cite>Yay</cite> "	ОК	
makeTags("address", "here") → " <address>here</address> "	" <address>here</address> "	ок	
makeTags("body", "Heart") → " <body>Heart</body> "	" <body>Heart</body> "	ОК	
$makeTags("i",\ "i") \to " < i > i < / i > "$	" <i>i</i> "	ок	
makeTags("i", "") → " <i></i> "	" <i></i> "	ок	
other tests		ОК	



next | chance

## String-1 > endsLy

prev | next | chance

Given a string, return true if it ends in "ly".

 $\begin{array}{l} \mathsf{endsLy}("\mathsf{oddly"}) \to \mathsf{true} \\ \mathsf{endsLy}("\mathsf{y"}) \to \mathsf{false} \\ \mathsf{endsLy}("\mathsf{oddy"}) \to \mathsf{false} \end{array}$ 

Go ...Save, Compile, Run (ctrl-enter)

<pre>public boolean endsty(string str) {    if(str.length() &lt; 2)          return false;</pre>
return str.substring(str.length() - 2).equals("ly");

Expected	Run		
endsLy("oddly") → true	true	ок	
endsLy("y") $\rightarrow$ false	false	ок	
$endsLy("oddy") \rightarrow false$	false	ок	
endsLy("oddl") $\rightarrow$ false	false	ок	
$endsLy("olydd") \rightarrow false$	false	ок	
endsLy("ly") $\rightarrow$ true	true	ок	
endsLy("") $\rightarrow$ false	false	ок	
$endsLy("falsey") \to false$	false	ок	
$endsLy("evenly") \rightarrow true$	true	ок	
other tests		οк	



### String-1 > middleThree

```
prev | next | chance
```

Given a string of odd length, return the string length 3 from its middle, so "Candy" yields "and". The string length will be at least 3.

```
\label{eq:middleThree} \begin{split} & \mathsf{middleThree}(\mathsf{"Candy"}) \to \mathsf{"and"} \\ & \mathsf{middleThree}(\mathsf{"and"}) \to \mathsf{"and"} \\ & \mathsf{middleThree}(\mathsf{"solving"}) \to \mathsf{"lvi"} \end{split}
```

```
Go ...Save, Compile, Run (ctrl-enter)
```

```
public String middleThree(String str) {
  int mitad = str.length() / 2;
  i return str.substring(mitad - 1, mitad + 2);
}
```

Expected	Run		
$middleThree("Candy") \rightarrow "and"$	"and"	ок	
$middleThree("and") \rightarrow "and"$	"and"	ок	
middleThree("solving") → "Ivi"	"lvi"	ок	
middleThree("Hi yet Hi") → "yet"	"yet"	ок	
$middleThree("java\ yet\ java") \to "yet"$	"yet"	ок	
$middleThree("Chocolate") \to "col"$	"col"	ок	
$middleThree("XabcxyzabcX") \to "xyz"$	"xyz"	ок	
other tests		ок	



#### String-1 > firstTwo

prev | next | chance

Given a string, return the string made of its first two chars, so the String "Hello" yields "He". If the string is shorter than length 2, return whatever there is, so "X" yields "X", and the empty string "" yields the empty string "". Note that str.length() returns the length of a string.

```
\begin{array}{l} {\rm firstTwo}("{\rm Hello"}) \to "{\rm He"} \\ {\rm firstTwo}("{\rm abcdefg"}) \to "{\rm ab"} \\ {\rm firstTwo}("{\rm ab"}) \to "{\rm ab"} \end{array}
```

```
...Save, Compile, Run (ctrl-enter)
```

```
public String firstTwo(String str) {
    if(str.length() < 2)
    return str;
    return str.substring(0, 2);
}</pre>
```

Expected	Run		
firstTwo("Hello") → "He"	"He"	ок	
$firstTwo("abcdefg") \rightarrow "ab"$	"ab"	ок	
firstTwo("ab") → "ab"	"ab"	οк	
firstTwo("a") → "a"	"a"	ок	
firstTwo("") → ""	""	ок	
firstTwo("Kitten") → "Ki"	"Ki"	ок	
firstTwo("hi") → "hi"	"hi"	ок	
firstTwo("hiya") → "hi"	"hi"	ок	
other tests		οк	

