String trickery
(Programming Club 2)

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1 Introduction

String is a list of letters. But because the manipulation of text is so often needed many languages have useful tools that allow to deal with strings as quickly as possible.

2 How it works

Very simple, just declare a string and play with it. Here you can see examples of how to declare "hello" in some languages, then change it to "Hello!" and print. As a challenge try to identify each language below[1]:

```
String s = new String("hello");
s = s.replace('h', 'H');   // A copy is made.
s += '!';   // again!
System.out.println(s);
```

```
string s = "hello";
s[0] = 'H';
s += '!';
cout << s << endl;
```

```
s = 'hello'
s_list = list(s)
s_list[0] = 'H'
s_list.append('!')
print(''.join(s_list))
```

```
var s :String = "hello"
s = s.replace('h', 'H')
s += '!'
println(s)
```

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[1]Java, C++, Python, ?

3 Try some coding!

Have a look here for interesting challenges of varying difficulty: `https://www.hackerrank.com/interview/interview-preparation-kit/strings/challenges` You can choose your favourite language and try to manipulate strings in interview-like problems. Also, make sure that you know how to do the following in your programming language:

- Check length

- Truncate first or last k letters

- Split with a given separator

- Check whether one string is contained in another

- Convert a number into string

- Capitalize