

Lecture №**07****Review date:****06/05/2018****Checked by:****Горбушко К****Student:****Maypicio Морочо****Branch:****lesson7****Mark:****6 / 10**

EXERCISE 1

factorial < 1 not always equal to 1, only in case 0 and 1, in case numbers below 0 - factorial not exist. Easy fix - use unsigned type

```
func calculateFactorial(of number: Int) -> Int{  
func calculateFactorial(of number: UInt) -> Int{
```

my applause for alternative solution

*Actually, interesting to know - preferred solution for factorial calculation - not recursively. With recursive approach much more resources required to do calculation, and so time

EXERCISE 2

```
//bucle to control the iterations
```

It can be replaced with while cycle instead.

```
//somewhere inside your func  
var notSorted = true  
while(notSorted) {  
    notSorted = false  
    for i in 0..  
        array.count - 1 {  
        if sortedArr[i] > sortedArr[i+1] {  
  
            //do stuff here  
            notSorted = true  
        }  
    }  
}
```

function with selection sort approach missed

EXERCISE 3

try to use CharacterSet instead

EXERCISE 4

code style - hard to read =/

don't use deprecated api ('characters' is deprecated)

actually there is easiest way to do this and so much efficient - iterate only once throw string collection

```
var result = [Character : Int]()
for character in inputString {
    if ! result.keys.contains(character) {
        result[character] = 1
    }
    else {
        result[character]! += 1
    }
}
```

EXERCISE 5

ok

EXERCISE 6

we can discuss it later on

Reccomandations

Improve your codeStyle

cleanUp all unnecessary comments and commented code. If you think I should see it - uncomment it and add comments only if you think its strictly required (for example variant 2 or something like this)

Note: *If you need additional translation of homework task - just let me know