



# Extension functions

# Extension Functions

```
fun String.lastChar() = this.get(this.length - 1)
```

```
val c: Char = "abc".lastChar()
```

# Extension Functions

```
fun String.lastChar() = this.get(this.length - 1)
```

```
val c: Char = "abc".lastChar()
```

λ lastChar() for String in com.example.ut

λ last() for CharSequence in kotlin.text

λ last {...} (predicate: (Char) -> Boolean)

λ lastOrNull() for CharSequence in kotlin

λ lastOrNull {...} (predicate: (Char) -> Boolean)

# Extension Functions

```
fun String.lastChar() = this.get(this.length - 1)
```



this can be omitted

```
fun String.lastChar() = get(length - 1)
```

# Extension Functions

```
fun String.lastChar() = get(length - 1)
```

```
import com.example.util.lastChar
```

```
val c: Char = "abc".lastChar()
```

# Extension Functions

```
fun String.lastChar() = get(length - 1)
```

```
import com.example.util.*
```

```
val c: Char = "abc".lastChar()
```

# Calling Extension Functions from Java code

**StringExtensions.kt**

```
fun String.lastChar() = get(length - 1)
```

**JavaClass.java**

```
import static StringExtensionsKt.lastChar;  
char c = lastChar("abc");
```



How many arguments does the `repeat` function have if you call it from Java?

```
fun String.repeat(n: Int): String {  
    val sb = StringBuilder(n * length)  
    for (i in 1..n) {  
        sb.append(this)  
    }  
    return sb.toString()  
}
```

1. 1  
2. 2  
3. 3







How many arguments does the `repeat` function have if you call it from Java?

```
fun String.repeat(n: Int): String {  
    val sb = StringBuilder(n * length)  
    for (i in 1..n) {  
        sb.append(this)  
    }  
    return sb.toString()  
}
```

1.	1
2.	2
3.	3

```
StringUtilKt.repeat("ab", 3); // ababab
```





Is it possible to call  
a `private` member of `String` inside  
an extension function to `String`?

```
fun String.lastChar() = get(length - 1)
```

1. yes
2. no





Is it possible to call  
a `private` member of `String` inside  
an extension function to `String`?

```
fun String.lastChar() = get(length - 1)
```

1. yes

2. no

In Java it's not possible to call  
a `private` member  
from another class

In Java it's not possible to call  
a `private` member  
from a `static` function  
declared in another class

In Kotlin it's not possible to call  
a `private` member  
from an extension function  
(a `static` function declared in another class)