

String与Array

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码拉松



实力IT教育 www.520it.com

关于String的思考

- 1个String变量占用多少内存？
- 下面2个String变量，底层存储有什么不同？

```
var str1 = "0123456789"  
var str2 = "0123456789ABCDEF"
```

- 如果对String进行拼接操作，String变量的存储会发生什么变化？

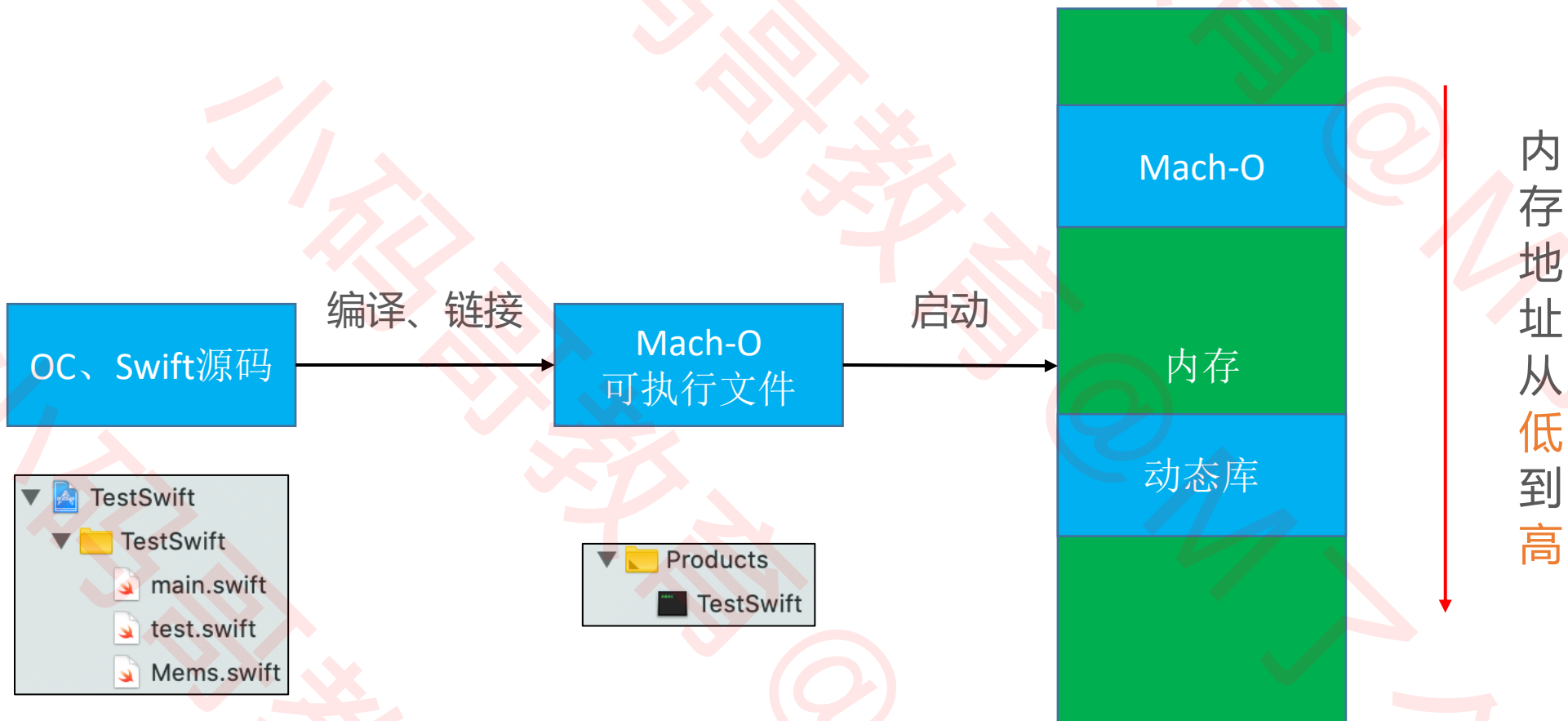
```
str1.append("ABCDE")  
str1.append("F")  
str2.append("G")
```

- ASCII码表：<https://www.ascii-code.com/>

内存地址从低到高



从编码到启动APP



dyld_stub_binder

■ 符号的延迟绑定通过dyld_stub_binder完成

■ jmpq *0xb31(%rip)格式的汇编指令

□ 占用6个字节

Offset	Data	Description	Value
00006000	000000100004676	Indirect Pointer	[0x100006000->_\$\$SKsE4last7ElementQzSg
00006008	0000001000047AC	Indirect Pointer	[0x100006008->_\$\$SS10FoundationE6forma
00006010	000000100004680	Indirect Pointer	[0x100006010->_\$\$SS19stringInterpolati
00006018	00000010000468A	Indirect Pointer	[0x100006018->_\$\$SS21_builtinStringLit
00006020	000000100004694	Indirect Pointer	[0x100006020->_\$\$SS6appendyySSF]
00006028	00000010000469E	Indirect Pointer	[0x100006028->_\$\$SYsSHRzSH8RawValueSYR
00006030	0000001000046A8	Indirect Pointer	[0x100006030->_\$\$SYsSHRzSH8RawValueSYR
00006038	0000001000046B2	Indirect Pointer	[0x100006038->_\$\$SYsSHRzSH8RawValueSYR
00006040	00000010000463A	Indirect Pointer	[0x100006040->_\$\$Sa12arrayLiteralSayxG
00006048	000000100004644	Indirect Pointer	[0x100006048->_\$\$Sa6appendyyxFs5UInt8
00006050	0000001000046BC	Indirect Pointer	[0x100006050->_\$\$SaMa]
00006058	00000010000464E	Indirect Pointer	[0x100006058->_\$\$SayxSicigs5UInt8V_Tg5
00006060	000000100004658	Indirect Pointer	[0x100006060->_\$\$Sls16IndexingIterato
00006068	000000100004662	Indirect Pointer	[0x100006068->_\$\$Sn15uncheckedBoundsSn
00006070	00000010000466C	Indirect Pointer	[0x100006070->_\$\$s16IndexingIteratorV4
00006078	0000001000046C6	Indirect Pointer	[0x100006078->_\$\$s17_assertionFailure_
00006080	0000001000046D0	Indirect Pointer	[0x100006080->_\$\$s17withUnsafePointer2
00006088	0000001000046DA	Indirect Pointer	[0x100006088->_\$\$s18_fatalErrorMessage
00006090	0000001000046E4	Indirect Pointer	[0x100006090->_\$\$s26DefaultStringInter
00006098	0000001000046EE	Indirect Pointer	[0x100006098->_\$\$s26DefaultStringInter
000060A0	0000001000046F8	Indirect Pointer	[0x1000060A0->_\$\$s26DefaultStringInter
000060A8	000000100004702	Indirect Pointer	[0x1000060A8->_\$\$s27_allocateUninitial
000060B0	00000010000470C	Indirect Pointer	[0x1000060B0->_\$\$s27_bridgeAnythingTo0
000060B8	000000100004716	Indirect Pointer	[0x1000060B8->_\$\$s2eeoiySbx_xtSYRzSQ8R
000060C0	00000010000461C	Indirect Pointer	[0x1000060C0->_malloc_size]
000060C8	000000100004626	Indirect Pointer	[0x1000060C8->_memcpy]
000060D0	000000100004630	Indirect Pointer	[0x1000060D0->_memset]
000060D8	000000100004720	Indirect Pointer	[0x1000060D8->_swift_allocateGenericVa

Offset	Data	Description	Value
00004685	E982FFFFFF	jmp	0x10000460c
0000468A	6893000000	push	0x93
0000468F	E978FFFFFF	jmp	0x10000460c
00004694	68E0000000	push	0xe0
00004699	E96EFFFFFF	jmp	0x10000460c
0000469E	68F8000000	push	0xf8
000046A3	E964FFFFFF	jmp	0x10000460c
000046A8	6828010000	push	0x128

关于Array的思考

```
public struct Array<Element>  
var arr = [1, 2, 3, 4]
```

- 1个Array变量占用多少内存？
- 数组中的数据存放在哪里？

