

Unit 2—Lesson 1:

Strings

Strings

```
let greeting = "Hello"  
var otherGreeting = "Salutations"
```

```
let joke = ""  
    Q: Why did the chicken cross the road?  
    A: To get to the other side!  
    ""  
print(joke)
```

```
Q: Why did the chicken cross the road?  
A: To get to the other side!
```

String basics

Escaping

```
let greeting = "It is traditional in programming to print \"Hello, world!\""
```

Escape	Description
<code>\"</code>	Double quote
<code>\\</code>	Backslash
<code>\t</code>	Tab
<code>\r</code>	Carriage return (return to beginning of the next line)

String basics

Empty strings

```
var myString = ""  
  
if myString.isEmpty == true {  
    print("The string is empty")  
}
```

String basics

Characters

```
let a = "a" // 'a' is a string  
let b: Character = "b" // 'b' is a Character
```

Concatenation

```
let firstName = "John"  
let lastName = "Doe"  
var username = firstName + lastName // "JohnDoe"
```

```
username = username + ", welcome!" // "JohnDoe, welcome!"
```

Interpolation

```
let name = "Rick"
```

```
let age = 30
```

```
print("\ (name) is \ (age) years old")
```

Rick is 30 years old

Interpolation

Expressions

```
let a = 4
let b = 5
print("If a is \((a)\) and b is \((b)\), then a + b equals \((a+b)\)")
```

If a is 4 and b is 5, then a + b equals 9

String equality and comparison

```
let month = "January"
let otherMonth = "January"
let lowercaseMonth = "january"

if month == otherMonth {
    print("They are the same")
}

if month != lowercaseMonth {
    print("They are not the same.")
}
```

They are the same.

They are not the same.

String equality and comparison

Ignoring case

```
let name = "Johnny Appleseed"
if name.lowercased() == "joHnnY aPPleseeD".lowercased() {
    print("The two names are equal.")
}
```

The two names are equal.

String equality and comparison

Prefix and suffix

```
let greeting = "Hello, world!"
```

```
print(greeting.hasPrefix("Hello"))  
print(greeting.hasSuffix("world!"))  
print(greeting.hasSuffix("World!"))
```

```
true
```

```
true
```

```
false
```

String equality and comparison

Finding substrings

```
let email = "john.doe@apple.com"  
if email.contains("@apple.com") == true {  
    print("Apple mail verified")  
}
```

Apple mail verified

String equality and comparison

Checking length

```
let name = "Ryan Mears"  
let count = name.count  
let newPassword = "1234"  
  
if newPassword.count < 8 {  
    print("This password is too short. Passwords should have at least 8 characters.")  
}
```

This password is too short. Passwords should have at least 8 characters.

String equality and comparison

Using switch

```
let someCharacter: Character = "e"
switch someCharacter {
    case "a", "e", "i", "o", "u":
        print("\(someCharacter) is a vowel.")
    default:
        print("\(someCharacter) is not a vowel.")
}
```

e is a vowel.

String

Checking length

```
let name = "Ryan Mears"  
let count = name.count  
print(name.count)
```

10

Unicode

```
let cow = "🐮"  
let credentials = "résumé"  
let myBook = "私の本"
```


Unit 2—Lesson 1

Lab: Strings



Open and complete the exercises in Lab – `Strings.playground`

