A Scala split String example

By Alvin Alexander. Last updated: May 30, 2015

Scala String FAQ: How do I split a `String` in Scala based on a field separator, such as a string I get from a comma-separated value (CSV) or pipe-delimited file.

Solution

Use one of the `split` methods that are available on `String` objects:

```
scala> "hello world".split(" ")
res0: Array[java.lang.String] = Array(hello, world)
```

The `split` method returns an array of `String` elements, which you can then treat as a normal Scala Array:

```
scala> "hello world".split(" ").foreach(println)
hello
world
```

Real-world example

Here's a real-world example that shows how to split a URL-encoded string you might receive in a web application:

```
scala> val result = "oauth_token=FOO&oauth_token_secret=BAR&oauth_expires_in=3600"

scala> val nameValuePairs = result.split("&")
nameValuePairs: Array[java.lang.String] = Array(oauth_token=FOO, oauth_token_secret=BAR, oauth_expires_
```

As you can see in the second line, I call the `split` method, telling it to use the `&` character to split my string into multiple strings. As you can see in the REPL output, the variable `nameValuePairs` is an `Array` of `String` type, and in this case, these are the name/value pairs I wanted.

Splitting a CSV string

Here's an example that shows how to split a CSV string into a string array:

```
scala> val s = "eggs, milk, butter, Coco Puffs"
s: java.lang.String = eggs, milk, butter, Coco Puffs

// 1st attempt
scala> s.split(",")
res0: Array[java.lang.String] = Array(eggs, " milk", " butter", " Coco Puffs")
```

Note that when using this approach it's best to trim each string. This is shown in the following code, where I use the `map` method to call `trim` on each string before returning the array:

```
// 2nd attempt, cleaned up
```

more scala

general

recursion examples
using match like switch
current date/time
if/then/else
ternary operator
for loops and yield

curly brace packaging

add methods to existing classes

spring framework dependency injection

classes and methods

creating javabeans

importing java code

multiple constructors

named and default parameters

calling methods

class casting

equivalent of java .class

rename classes on import

private primary constructor

try/catch/finally

try, catch, and finally syntax

declare a null var before try/catch

collections

mutable arrays

string arrays

convert array to string

data types

convert java collections to scala

multidimensional arrays (2D array)

iterating over lists (foreach, for)

iterating over maps

convert array to string with mkString

list

list, foreach, and for

merging lists

creating lists

list examples

add elements to a list

the filter method

map

map class examples

iterating over maps

tuple

tuple examples

map tuples in anonymous function

strings

multiline strings

string arrays

string formatting

convert array to string

split string example

```
scala> s.split(",").map(_.trim)
res1: Array[java.lang.String] = Array(eggs, milk, butter, Coco Puffs)
```

Splitting with regular expressions

You can also split a string based on a regular expression (regex). This example shows how to split a string on whitespace characters:

```
scala> "hello world, this is Al".split("\\s+")
res0: Array[java.lang.String] = Array(hello, world,, this, is, Al)
```

For more examples of regular expressions, see the Java Pattern class, or see my common Java regular expression examples.

Where the split method comes from

The `split` method is overloaded, with some versions of the method coming from the Java `String` class and some coming from the Scala `StringLike` class. For instance, if you call `split` with a `Char` argument instead of a `String` argument, you're using the `split` method from `StringLike`:

```
// split with a String argument
scala> "hello world".split(" ")
res0: Array[java.lang.String] = Array(hello, world)

// split with a Char argument
scala> "hello world".split(' ')
res1: Array[String] = Array(hello, world)
```

The subtle difference in that output -- `Array[java.lang.String]` versus `Array[String]` -- is a hint that something is different, but as a practical matter, this isn't important. Also, with the Scala IDE project integrated into Eclipse, you can see where each method comes from when the Eclipse "code assist" dialog is displayed. (IntelliJ IDEA and NetBeans may show similar information.)

> Note: The actual Scala class that contains the `split` method may change over time. At the time of this writing the `split` method is in the `StringLike` class, but as the Scala libraries are reorganized this may change.

convert string to int

compare strings with ==

a 'chomp' method

find regex in string

functions and functional programming

named and default parameters

pass one function to another

pass a function to a function (swing)

files

open and read files

shell script example

command line and scripts

read command line arguments

execute (exec) system commands

prompting a user, reading input

make scripts run faster

show more methods in repl

show more info on classes/objects in repl

paste multiline commands in repl

database

jdbc connection, select

actors and concurrency

akka 'hello world'

akka ping-pong example

stop/quit an actor

stop actor and shut down

akka futures

akka ask, future, await, timeout

parallel collections, .par, and performance

akka remote example

akka remote – objects as messages

idioms

using option, some, and none

methods should have no side effects

prefer immutable code

email

imap client (using ssl and imaps)

imap client with search

play framework

play framework recipes

deploy to production

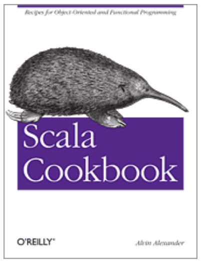
json method in controller

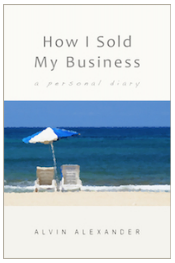
tags: java scala scala split string

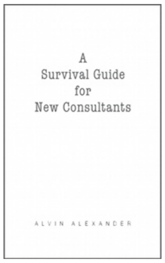
related

- Java split String - Split a String into tokens with StringTokenizer
- How to transform one Scala collection to another with the map function (method)
- How to convert a Scala array (sequence) to string with mkString
- Scala - How to convert a multiline String to an Array (or Seq)
- How to replace regular expression patterns in strings in Scala
- A Scala String chomp (or chop) function

books i've written







new

- Facebook - How do I search the history of my own posts?
- How to use multiple generators in Scala 'for' expressions (loops)
- When you want to store static text in an Android file
- A Java FIFO queue class
- A Java tuple class
- A Java method to calculate the NFL Passer Rating
- An Android method to center text when using Canvas drawText
- An Android cheat sheet (my notes, main concepts)
- How to show an HTML WebView in an Android AlertDialog
- A Java method to determine if an integer is between a range

creating crud forms

@for/table rows and columns

convert objects to json

run play on different port

populate data on startup

using map in template

template comments

template functions

404 and 500 errors

mapping field validators

web service request with timeout

play console commands/help

testing web services with curl

logout, destroy session

read cookies

web services

rest client using apache httpclient

twitter client example

json parsing using lift-json

json array parsing using lift-json

lift framework form examples

xml

create xml literal

generate dynamic xml

xml - pretty printing

xml - save to file

xml - serialize, deserialize

xml - load a file

xml - load a url

xml - xpath searching

searching xmlns namespaces, xpath

xml - extract data from nodes

xml - extract data from arrays

xml - parsing, tags

xml - using match expressions

xml - many examples

build, testing, and debugging

sbt documentation (pdf)

show sbt history

scalatest - installing

scalatest - writing tdd tests

scalatest - writing bdd tests

scalatest - given/when/then with bdd

scalatest - test suite

scalatest - expected, actual

scalatest - mark test as pending

scalatest - testing exceptions

scalatest - tagging tests

more

alvin's blog

Post new comment

Your name:

Anonymous

E-mail:

The content of this field is kept private and will not be shown publicly.

Homepage:

Subject:

Comment: *

☑ Notify me when new comments are posted

● All comments ○ Replies to my comment

Preview

- scalatest - disabling tests
- scalatest - mock objects
- scalatest - running in eclipse

categories

- android (45)
- best practices (63)
- career (50)
- cvs (27)
- design (33)
- drupal (91)
- eclipse (6)
- funny (3)
- gadgets (108)
- git (15)
- intellij (4)
- java (429)
- jdbc (26)
- swing (74)
- jsp (9)
- latex (26)
- linux/unix (289)
- mac os x (315)
- mysql (54)
- ooa/ood (11)
- perl (156)
- php (97)
- postgresql (17)
- ruby (56)
- scala (336)
- sencha (23)
- servlets (10)
- svn (6)
- technology (84)
- testing (13)
- uml (24)

java

- java applets
- java faqs
- misc content
- java source code
- test projects
- lejos

perl

- perl faqs
- programs
- perl recipes
- perl tutorials

unix

- man (help) pages
- unix by example
- tutorials

source code warehouse

- java examples
- drupal examples

misc

- privacy policy
- terms & conditions
- subscribe
- unsubscribe
- wincvs tutorial
- function point analysis (fpa)
- fpa tutorial

other

- mobile website
- rss feed
- my photos
- life in alaska
- how i sold my business
- living in talkeetna, alaska
- my bookmarks
- inspirational quotes
- source code snippets