

Contents

- 01 The String Story
- 02 Crew Emails
- 03 Confirmative
- → 04 Multi-line Strings 05 Capture Groups



Finding More Than Just 1 Match

Single text file

King penguin
Emperor penguin
Wandering albatross
Arctic Gern
Rockhopper Penguin
Weddell seal
Narwhal

We want to find all the birds





Looking at the List of Birds as a Single, Long String

King penguin \n Emperor
penguin \n Wandering
albatross \n Arctic Gern
\n Narwhal \n Rockhopper
Penguin \n Weddell seal



Multiline strings are delimited by the newline character



WARNING! Different operating systems might use other newline characters.



Analyze the Subject String

Subject

King penguin
Emperor penguin
Wandering albatross
Arctic Tern
Narwhal
Rockhopper Penguin
Weddell seal

Has multiple lines separated by newline characters

Each animal name is 1-2 words

All animal names have mixed casing



Matching the First Animal Name

<u>Pattern Goals</u>

penguin
albatross
tern
full name
nothing before or after

all occurrences

Emperor penguin
Wandering albatross
Arctic Tern
Narwhal
Rockhopper Penguin
Weddell seal

Regular Expression

Subject

King penguin

/penguin/i

Match the first occurrence of "penguin"

But we want to match all penguins, not just the first

BREAKING THE ICE

Global Modifier

Pattern Goals

penguin
albatross
tern
full name
nothing before or after

all occurrences

Regular Expression

/penguin/ig

Match "penguin" as many times as possible with global modifier

Subject

King penguin

Emperor penguin

Wandering albatross

Arctic Tern

Narwhal

Rockhopper Penguin

Weddell seal

BREAKING THE ICE

Matching the Full Name of Just Penguin Animals

Regular Expression

/w+\spenguin/ig

Subject

King penguin
Emperor penguin
Wandering albatross
Arctic Tern
Narwhal
Rockhopper Penguin
Weddell seal

Pattern Goals

- penguin
 albatross
 tern
- full name
 nothing before or after
- all occurrences



Our Anchors Aren't Working!

Regular Expression

/^\w+\spenguin\$/ig



Now nothing is matching!

Pattern Goals

- 🛭 penguin
- albatross
- 🗴 tern
- full name
- nothing before or after
- all occurrences

King penguin
Emperor penguin
Wandering albatross
Arctic Tern
Narwhal
Rockhopper Penguin
Weddell seal

BREAKING THE ICE

Anchors in a Normal Subject String

Subject

A anchors to beginning of string

King penguin
Emperor penguin
Wandering albatross
Arctic Tern
Narwhal
Rockhopper Penguin
Weddell seal

\$

anchors to end of string

we were hoping it would do this!

BREAKING THE ICE

Anchors in a Multiline String

Regular Expression

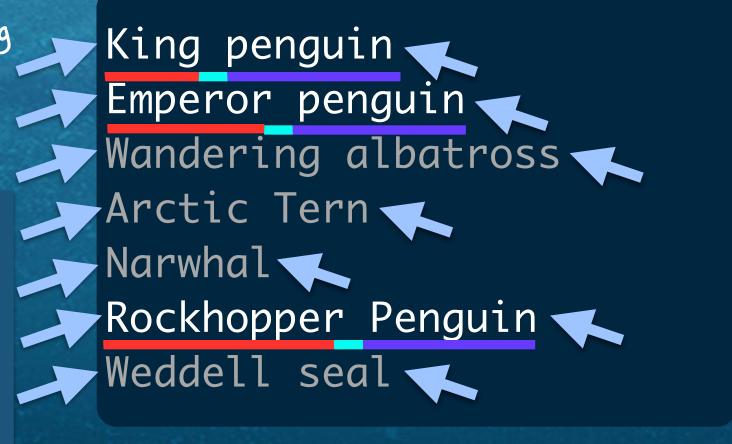
/^\w+\spenguin\$/mig

Subject

anchors to beginning of line and not entire subject

Pattern Goals

- penguin
 albatross
 tern
- full name
- nothing before or after
- all occurrences



= multiline modifier

\$ anchors to end of line and not entire subject

BREAKING THE ICE

Capturing the Full Animal Name

Regular Expression



Adds "albatross" to search pattern

/^\w+\s(penguin|albatross)\$/mig

Pattern Goals

- 🗸 penguin
- albatross
 tern
- full name
- nothing before or after
- all occurrences

Subject

King penguin

Emperor penguin

Wandering albatross

Arctic Tern

Narwhal

Rockhopper Penguin

Weddell seal

BREAKING THE ICE

Capturing the Full Animal Name

Adds "tern" to search pattern



Regular Expression

/^\w+\s(penguin|albatross|tern)\$/mig

Pattern Goals

- penguin
- albatross
- 🗸 tern
- full name
- v nothing before or after
- ✓ all occurrences

Subject

King penguin

Emperor penguin

Wandering albatross

Arctic Tern

Narwhal

Rockhopper Penguin

Weddell seal

BREAKING THE ICE