Getting to know glue

INTERMEDIATE REGULAR EXPRESSIONS IN R

Angelo Zehr
Data Journalist

Pasting is tedious

```r
username <- "Adam"
paste("Hi", username)
```

Will print: `Hi Adam`

```r
library("glue")
username <- "Adam"
glue("Hi {username}")
```

Will also print: `Hi Adam`

What you pass to glue

```r
username_1 <- "Adam"

username_2 <- NA


glue(
  "Hi {username_1} and {username_2}",
  .na = ""
)
```

Will print: `Hi Adam and`

What is a template string?

```
username_1 <- "Adam"
username_2 <- "Eve"


glue("Hi {username_1} and {username_2}")
```

Will print: `Hi Adam and Eve`

`glue("{2 + 2}")` will print `"4"`

Temporary variables

```
glue(
  "The train is {length} meters long.",
  length = 50
)
```

Will print:

```
"The train is 50 meters long."
```

Glue inside data frames

```r
df %>%
  mutate(
    new_column = glue("Hi {username}")
  )
```

Will return:

```
    username    new_column
1    "Adam"     "Hi Adam"
```

Let's practice!

INTERMEDIATE REGULAR EXPRESSIONS IN R

Collapsing multiple elements into a string

INTERMEDIATE REGULAR EXPRESSIONS IN R

Angelo Zehr
Data Journalist

Introducing glue_collapse

```r
usernames <- c("Adam", "Betty", "Cora", "David")

glue_collapse(usernames)
```

Will print `AdamBettyCoraDavid`

More elaborate example

```
glue_collapse(
  usernames,
  sep = ", ",
  last = ", and ",
  width = 27
)
```

Will print `Adam, Betty, Cora, and Dav...`

Passing glue collapse to glue

```
glue(
  "Hello {users}.",
  users = glue_collapse(
    usernames,
    sep = ", ",
    last = ", and "
  )
)
```

Will print `Hello Adam, Betty, Cora, and David.`

Collapsing columns of a data frame

Data frame `df`

```
x  y
1  4
2  5
3  6
```

`glue_collapse(df$x)` will print `123`

Let's practice!

INTERMEDIATE REGULAR EXPRESSIONS IN R

datacamp

Gluing regular expressions

INTERMEDIATE REGULAR EXPRESSIONS IN R

Angelo Zehr
Data Journalist

datacamp

Collapsing with the pipe

```
pattern = "Nemo|Harmony|Dory"
```

can also be created like this:

```
names <- c("Nemo", "Harmony", "Dory")
```

```
pattern = glue_collapse(names, sep = "|")
```

A quick refresh

Character Class	Name	Example
\\d	Digit	0, 1, 2, 3,…
\\w	Word	a, b, c…, 1, 2, 3…, _
\\s	Space	" " , tabs and line breaks
[A-Za-z]	Letter	A, B, C,…, a, b, c,…

A quick refresh

Multiplier	Repetitions
+	One or more repetitions
*	Zero or more repetitions

Break up complex patterns

```
api_response <- "payload: 'Adam, 5, 3', headers: 'Auth...'"
```

```
str_match(api_resopnse, pattern = "[A-Za-z]+, \\d+, \\d+")
```

Will match: `Adam, 5, 3`

```
pattern = glue_collapse(c(
  "name" = "[A-Za-z]+",
  ", ",
  "attempts" = "\\d+",
  ", ",
  "logins" = "\\d+"
))
```

Let's practice!

INTERMEDIATE REGULAR EXPRESSIONS IN R