Introduction to

### Programming with Python

Regular Expressions

### regular expressions

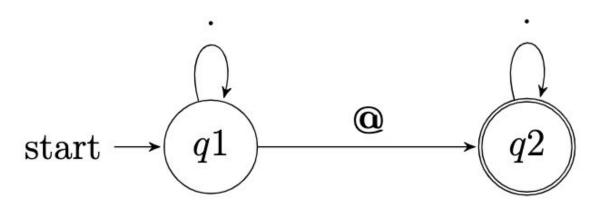
#### regexes

#### re

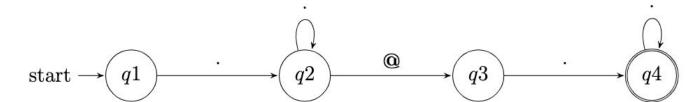
#### docs.python.org/3/library/re.html

# re.search(pattern, string, flags=0)

- any character except a newline
- \* 0 or more repetitions
- + 1 or more repetitions
- ? 0 or 1 repetition
- {m} m repetitions
  {m,n} m-n repetitions



- any character except a newline
- \* 0 or more repetitions
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- ^ matches the start of the string
- \$ matches the end of the string or just before the newline at the end of the string

#### set of characters

[]

[^]

complementing the set

\d	decimal digit
<b>\</b> D	not a decimal digit
<b>\</b> s	whitespace characters
<b>\</b> S	not a whitespace character
\W	word character as well as numbers and the underscore
\W	not a word character

### re.IGNORECASE re.MULTILINE re.DOTALL

```
^[a-zA-Z0-9.!#$%&'*+\/=?^ `
\{ | \} \sim - ] + @[a - zA - Z0 - 9](?:[a - zA
-Z0-9-]{0,61}[a-zA-Z0-9])?(
?:\.[a-zA-Z0-9](?:[a-zA-Z0-
9-]{0,61}[a-zA-Z0-9])?)*$
```

## re.match(pattern, string, flags=0)

re.fullmatch(pattern, string, flags=0)

#### A B either A or B

(...) a group(?:...) non-capturing version



re.sub(pattern, repl, string, count=0, flags=0)

re.split(pattern, string, maxsplit=0, flags=0)

# re.findall(pattern, string, flags=0)

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