Introduction to

Programming with Python

Regular Expressions

regular expressions

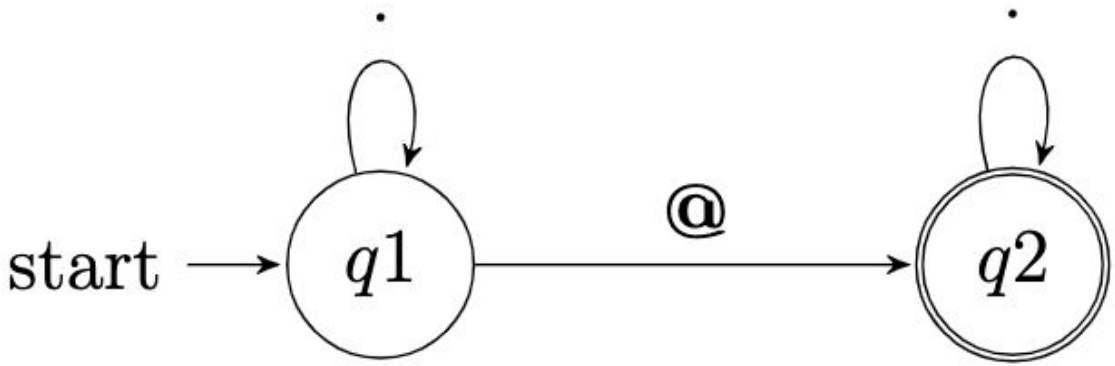
regexes

re

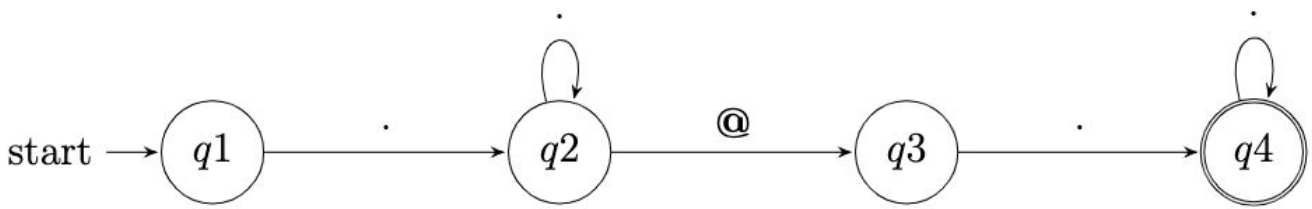
docs.python.org/3/library/re.html

```
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


.
.
start
q1
@
q2

`.`	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


start
q1
.
q2
.
@
q3
.
q4
.

^	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
`\D`	not a decimal digit
`\s`	whitespace characters
`\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.!#$%&'*+\/=?^_`
{|}~-]+@[a-zA-Z0-9](?:[a-zA
-Z0-9-]{0,61}[a-zA-Z0-9])?(
?:\.[a-zA-Z0-9](?:[a-zA-Z0-
9-]{0,61}[a-zA-Z0-9])?)*$
```

```
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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