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STRINGS

WAT LEREN WE?

- ▶ Strings
- ▶ ~~Strings over meerdere regels~~
- ▶ ~~Speciale tekens~~
- ▶ Positieve en negatieve indices voor strings
- ▶ Substrings
- ▶ Onveranderlijkheid van strings
- ▶ Stringmethodes:
 - ▶ `strip()`, `upper()`, `lower()`, `find()`, `replace()`, `split()` en `join()`
- ▶ ~~Speciale tekens~~
- ▶ ~~ASCII en UTF-8 coderingen~~



INDICES

- ▶ positieve en negatieve indices

p	y	t	h	o	n
0	1	2	3	4	5
-6	-5	-4	-3	-2	-1

- ▶ Voorbeelden:

```
>>> taal = 'python'
```

```
>>> taal[2]
```

```
't'
```

```
>>> taal[-4]
```

```
't'
```

```
>>> taal[9]
```

Traceback (most recent call last):

File "<input>", line 1, in <module>

IndexError: string index out of range



STRING DOORLOPEN

- ▶ Met index:

```
woord = input('Geef woord: ')\n\nfor i in range(len(woord)):\n    print(woord[i])
```

- ▶ Zonder index:

```
for letter in woord:\n    print(letter)
```

- ▶ Print alle letters op even index.



SUBSTRING

▶ Geheugensteuntje

p	y	t	h	o	n
0	1	2	3	4	5
-6	-5	-4	-3	-2	-1

▶ Voorbeelden:

```
>>> taal = 'python'
```

```
>>> taal[:]
```

```
'python'
```

```
>>> taal[2:]
```

```
'thon'
```

```
>>> taal[:4]
```

```
'pyth'
```

```
>>> taal[-10:10]
```

```
'python'
```

```
>>> taal[1:-3]
```

```
'yt'
```

```
>>> taal[-3:1]
```

```
''
```



SUBSTRING MET STAPPEN

▶ Geheugensteuntje

p	y	t	h	o	n
0	1	2	3	4	5
-6	-5	-4	-3	-2	-1

▶ Voorbeelden:

```
>>> taal = 'python'
```

```
>>> taal[::2]
'pto'
>>> taal[1::2]
'yhn'
>>> taal[:4:2]
'pt'
>>> taal[1:4:2]
'yh'
```

```
>>> taal[::-1]
'nohtyp'
>>> taal[1:4:-1]
''
>>> taal[4:1:-1]
'oht'
>>> taal[-2:-5:-1]
'oht'
```



IMMUTABLE

- Strings zijn onveranderbaar

```
>>> taal = 'python'
```

```
>>> taal[1] = 'i'
```

Traceback (most recent call last):

File "<input>", line 1, in <module>

TypeError: 'str' object does not support item assignment

```
>>> taal = taal[:1] + 'i' + taal[2:]
```

```
>>> print(taal)
```

```
python
```



STRING METHODES

▶ strip()

```
>>> taal = ' pyt hon \n'
```

```
>>> taal.strip()
```

```
'pyt hon'
```

```
>>> taal
```

```
' pyt hon \n'
```



STRING METHODES

► upper() en lower()

```
>>> taal = 'Python'
```

```
>>> taal.lower()
```

```
'python'
```

```
>>> taal.upper()
```

```
'PYTHON'
```

```
>>> print(taal)
```

```
Python
```



STRING METHODES

► find()

```
>>> taal = 'programmeren in python'
```

```
>>> taal.find('p')
```

```
0
```

```
>>> taal.find('in')
```

```
13
```

```
>>> taal.find('yp')
```

```
-1
```



STRING METHODES

► replace()

```
>>> taal = 'programmeren in python'
```

```
>>> taal.replace('p', 'P')
```

```
'Programmeren in Python'
```

```
>>> taal.replace('in', 'met')
```

```
'programmeren met python'
```

```
>>> print(taal)
```

```
'programmeren in python'
```

