03.19 - Strings

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1 Strings

In Python we can not only work with numbers, but also with character strings, so-called **strings**. This includes any sequence of quoted characters. For example *"Hello"* is a string and *"Hello world"* as well, but also *"123.2"* or *"!Attention!"*

1.0.1 General

We can also output strings with the print() function.

```
In [1]: print("Hello World")
```

```
Hello World
```

You can store strings like numbers in variables.

```
In [2]: name = "Max"
```

```
In [3]: print(name)
```

```
Max
```

1.0.2 Merge strings

You can also merge two or more strings using **+**.

```
In [4]: print("I am: " + "Max")
```

```
I am: Max
```

```
In [5]: print("I am: " + name + ". And who are you?")
```

```
I am: Max. And who are you?
```

However, if you try to add numbers and strings, you get an error message:

```
In [6]: print("I am: " + 4)
```

```
---------------------------------------------------------------------------

TypeError                                 Traceback (most recent call last)

<ipython-input-6-7d87c24bfadf> in <module>()
----> 1 print("I am: " + 4)


TypeError: must be str, not int
```

1.0.3 Convert a number to a string

You can correct these errors by converting the number into a string. You have two choices:
1.) You put quotation marks around the number and turn it into a string:

```
In [7]: print("I am: " + "4")
```

```
I am: 4
```

2.) You convert the number into a string with the **str()** function:

```
In [8]: age = 22
        print("I am: " + str(age))
```

```
I am: 22
```

Notice that you can no longer count on "4" or str(age)!

1.0.4 Play around with what you've learned:

- Output some strings composed with + by using the print() - function! :-)

```
In [ ]:
```