

Cheat sheet: Python basics (#1)

Scalar immutable data types

float 0.1, 3.9E-12
complex 3.0 + 1.2j
int 3, -2, ...
bool True, False
string "string", """Multiline string"""

Arithmetic operators

+ - * / usual arithmetic operators
//, % integer division, remainder
** power

Relational operators

==, !=, <, <=, >, >=

Assignment

= (Aliasing!)

String indexing

str[pos], str[lower:upper:incr]

0-based indexing

lower – incl., upper – excl.

Def.: lower=0, upper=len(str), incr=1

String concatenation *str1 + str2*

String repetition *str * 3*

Type conversion

int(), float(), complex(), str()

Read user input **input("Prompt:")**

String formatting

f"{expr:form}"

"{:form}".format(expr)

Cheat sheet: Control structures

Branching

```
if Condition1:  
    Code1  
elif Cond2:  
    Code2  
...  
else:  
    DefaultCode
```

Loops

```
for loopvar in iterable:  
    loop code  
else:  
    executed if all items in iterable  
    consumed  
  
while condition:  
    loop code  
else:  
    executed if condition became False  
  
continue    Back to loop header and  
              reevaluate / consume next  
break      Leave loop
```