

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 "some string",
"""Multiline string"""

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.
Defaults: 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

"{:form}".format(expr)

f"{expr:form}" (Python >= 3.6)

Cheat sheet: Python basics (#2)

Format specifiers

`:Wd` Integer number
`:W.Pf` Float point, fixed notation
`:W.PE` Float, exponential notation
`:W.PG` `:f` or `:e` depending on value
`:Ws` string
 W width
 P precision (number of decim.)

Branching

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

Loops

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