

## Python Cheatsheet

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### Types:

**bool:** True  
**bytes:** b'Hello World'  
**complex:** 7+1.4j  
**dict:** {'test':7, 1.4:False}  
**int:** 7  
**float:** 1.4  
**list:** [7, True, 'hi']  
**tuple:** (7, True, 'hi')  
**str:** "Hello World"

### Keywords:

**and:** Connect two booleans.  
ex. True and False  
**assert:** Assert a value is True, if it isn't throws an exception.  
ex. assert a == b, "a is not b"  
**break:** Breaks out of a loop.  
**class:** Class declaration.  
ex. class NewPicture(Picture):  
**continue:** Returns execution to the top of a loop.  
**def:** Define a function.  
ex. def  
functionDefinition(argument1,  
argument2):  
**del:** Remove an object from memory  
ex. del foo  
**elif:** Python equivalent to 'else if'  
ex. elif(a != b):  
**else:** Final option in a string of if/elif statements.  
**except:** Catches a throw exception.  
ex. except NameError:  
**exec:** Execute a string containing python code.  
ex. exec """print 'Hello  
World'"""  
**finally:** Always executed following the try statement it's part of.  
**for x in xs:** Loop over an iterable object.  
ex. for num in [1, 2, 3]  
**from:** Indicates the module to import from.  
ex. from time import sleep  
**global:** Indicatest that the given variables are global in the code block.  
ex. global foo, bar  
**if:** Conditional statement.  
ex. if(x == 3):

**import:** Import a module.  
ex. import time  
**in:** Returns True if x is in xs.  
ex. x in xs  
**is:** Tests to see if two objects are the same.  
ex. obj1 is obj2  
**lambda:** Creates adhoc functions.  
ex. lambda x: x \* x  
**not:** boolean inversion  
ex. not True  
**or:** Connect two booleans.  
ex. True or False  
**pass:** Noop, for creating an empty block  
**print:** Prints the given value to screen  
ex. print "Hello World"  
**raise:** Raise an exception.  
ex. raise Exception("An error")  
**return:** Return from the given function.  
ex. return 7  
**try:** First half of a try / except statement  
**while:** Loop keyword.  
ex. while a == 3:  
**with:** Creates a context to perform functions on.  
ex. with open("file.txt") as f:  
**yield:** In a generator, acts like return, does not stop execution.  
yield foo

### Comparitors:

<, >, ==, >=, <=, <>, !=, is, in, is not, not in

### Conditionals:

```
if a == b:
    pass
elif a == c:
    pass
else:
    pass
```

### Exception Handling:

```
try:
    open("file.txt")
except IOError:
    pass
else:
    pass
finally:
    pass
```

**List Comprehension:**

```
[x*2 for x in [1,2,3] if x%2 == 1]
```

**Context Managers(with syntax):**

```
with open("file.txt") as f:  
    print f.read()
```

**Function Definition:**

```
def funName(arg, arg2=3, *arglist):  
    return arg * optionalArg
```

**Lambda Functions:**

```
lambda arg1, arg2: arg1 + arg2
```

**Generator Definition:**

```
def genName():  
    for x in [1,2,3]  
        yield x
```

**Class Creation:**

```
class myClass(parentClass):  
    def __init__(self, arg1):  
        self.objectArg = arg1  
    def method2(self):  
        return self.objectArg
```