Python Cheat Sheet: Keywords

"A puzzle a day to learn, code, and play"

Keyword	Description	Code example
`False, True`	Data values from the data type Boolean	`False == (1 > 2), True == (2 > 1)`

`and, or, not`	Logical operators:
	`(x and y)` → both x and y must be True
	`(x or y)` → either x or y must be True
	`(not x)` → x must be false
		`x, y = True, False`
		`(x or y) == True  # True`
		`(x and y) == False  # True`
		`(not y) == True  # True`

`break`	Ends loop prematurely	`while(True):`
		`  break # no infinite loop`
		`print("hello world")`

`continue`	Finishes current loop iteration	`while(True):`
		`  continue`
		`  print("43") # dead code`

`class`
 	
`def`
	Defines a new class → a real-world concept (object oriented programming)
	
	Defines a new function or class method. For latter, first parameter ("self") points to the class object. When calling class method, first parameter is implicit.
		`class Beer:`
		`  def __init__(self):`
		`  self.content = 1.0`
		`  def drink(self):`
		`  self.content = 0.0`
		
		`becks = Beer() # constructor - create class`
		`becks.drink() # beer empty: b.content == 0`

`if, elif, else`	Conditional program execution: program starts with "if" branch, tries the "elif" branches, and finishes with "else" branch (until one branch evaluates to True).	`x = int(input("your value: "))`
		`if x > 3: print("Big")`
		`elif x == 3: print("Medium")`
		`else: print("Small")`

`for, while`	`# For loop declaration`
	`for i in [0,1,2]:`
	`  print(i)`
		`# While loop - same semantics`
		`j = 0`
		`while j < 3:`
		`  print(j)`
		`  j = j + 1`

`in`	Checks whether element is in sequence	`42 in [2, 39, 42] # True`

`is`	Checks whether both elements point to the same object	`y = x = 3`
		`x is y # True`
		`[3] is [3] # False`

`None`	Empty value constant	`def f():`
		`  x = 2`
		`f() is None # True`

`lambda`	Function with no name (anonymous function)	`(lambda x: x + 3)(3) # returns 6`

`return`	Terminates execution of the function and passes the flow of execution to the caller. An optional value after the return keyword specifies the function result.	`def incrementor(x):`
		`  return x + 1`
		`incrementor(4) # returns 5`