Python Keywords

Python has a set of keywords that are reserved words that cannot be used as variable names, function names, or any other identifiers:

and Keyword

The and keyword is a logical operator.

Logical operators are used to combine conditional statements.

The return value will only be True if both statements return True, otherwise it will return False.

1st example

```
x = (5 > 3 \text{ and } 5 < 10) print(x) result True

x = (3 > 5 \text{ and } 10 < 5) print(x) result True
```

2nd example

if 5 > 3 and 5 < 10: print("Both statements are True")

else: print("At least one of the statements are False") result Both statements are True.

as Keyword

The as keyword is used to create an alias.

In the example above, we create an alias, c, when importing the calendar module, and now we can refer to the calendar module by using c instead of calendar.

```
import calendar as c print(c.month_name[1]) result January
```

assert Keyword

```
x = "welcome"
assert x != "hello", "x should be 'hello'"
#if condition returns False,
```

result AssertionError is raised:

break Keyword

The break keyword is used to break out a for loop, or a while loop.

```
i = 1
while i < 9: print(i)
if i == 3: break i += 1 result 1 2 3</pre>
```

class Keyword

The class keyword is used to create a class.

A class is like an object constructor. See the example below to see how we can use it to create an object.

```
class Person: name = "John" age = 36
p1 = Person() print(p1.name) result John
```

continue Keyword

The continue keyword is used to end the current iteration in a for loop (or a while loop), and continues to the next iteration.

```
for i in range(9):  if i == 3:
    continue    print(i)
if i == 3:    continue    print(i) for i in range(9):
result
0
1
2
4
5
6
7
8
```

def Keyword

The def keyword is used to create, (or define) a function.

```
def my_function(): print("Hello from a function") my_function()
result Hello from a function
```

del Keyword

The del keyword is used to delete objects. In Python everything is an object, so the del keyword can also be used to delete variables, lists, or parts of a list etc.

```
x = ["apple", "banana", "cherry"] del x[0] print(x) result ['banana', 'cherry']
elif Keyword
```

The elif keyword is used in conditional statements (if statements), and is short for else if.

```
for i in range(-5, 5): if i > 0: print("YES")
elif i == 0: print("WHATEVER")
else: print("NO")
result
NO
NO
NO
NO
```

WHATEVER

YES

NO NO

else Keyword

The else keyword is used in conditional statements (if statements), and decides what to do if the condition is False.

The else keyword can also be use in try...except blocks, see example below.

```
x = 2
if x > 3: print("YES")
else: print("NO") result NO
```

except Keyword

The except keyword is used in try...except blocks. It defines a block of code to run if the try block raises an error.

You can define different blocks for different error types, and blocks to execute if nothing went wrong, see examples below.

```
x = "hello" try: x > 3
except NameError: print("You have a variable that is not defined.")
except TypeError: print("You are comparing values of different type")
result You are comparing values of different type
x = "hello" try: x > hello
result You have a variable that is not defined
```

False Keyword

The False keyword is a Boolean value, and result of a comparison operation. The False keyword is the same as 0 (True is the same as 1).

```
print(5 > 6) result False
print(4 in [1,2,3]) result False
print("hello" is "goodbye") result False
```

Finally Keyword

The finally keyword is used in try...except blocks. It defines a block of code to run when the try...except...else block is final.

The finally block will be executed no matter if the try block raises an error or not.

This can be useful to close objects and clean up resources.

```
try: x > 3
except: print("Something went wrong")
else: print("Nothing went wrong")
finally: print("The try...except block is finished")
Result
Something went wrong
```

The try...except block is finished

for Keyword

The for keyword is used to create a for loop. It can be used to iterate through a sequence, like a list, tuple, etc.

```
for x in range(1, 9): print(x)
result
1
2
3
4
5
6
7
8
fruits = ["apple", "banana", "cherry"]
for x in fruits: print(x)
result
apple, banana, cherry
```

from Keyword

The from keyword is used to import only a specified section from a module.

```
from datetime import time
x = time(hour=15)
print(x)
result 15:00:00
```

global Keyword

The global keyword is used to create global variables from a no-global scope, e.g. inside a function.

```
#create a function:
def myfunction(): global x x = "hello"
#execute the function:
myfunction()
#x should now be global, and accessible in the global scope.
print(x)
Result hello
```

<mark>if Keyword</mark>

The if keyword is used to create conditional statements (if statements), and allows you to execute a block of code only if a condition is True.

Use the else keyword to execute code if the condition is False.

```
x = 5
if x > 6: print("YES")
else: print("NO")
result NO
```

import Keyword

The import keyword is used to import modules.

```
import datetime
x = datetime.datetime.now() print(x)
result 2025-03-26 09:48:08.562529
```

in Keyword

The in keyword has two purposes:

The in keyword is used to check if a value is present in a sequence (list, range, string etc.). The in keyword is also used to iterate through a sequence in a for loop:

```
fruits = ["apple", "banana", "cherry"]
if "banana" in fruits: print("yes")

result yes

fruits = ["apple", "banana", "cherry"]
for x in fruits: print(x)

result apple banana cherry
```

is Keyword

The is keyword is used to test if two variables refer to the same object.

The test returns True if the two objects are the same object.

The test returns False if they are not the same object, even if the two objects are 100% equal. Use the == operator to test if two variables are equal.

lambda Keyword

The lambda keyword is used to create small anonymous functions.

A lambda function can take any number of arguments, but can only have one expression. The expression is evaluated and the result is returned.

```
x = lambda a, b, c : a + b + c
print(x(5, 6, 3))
```

Result 14

None Keyword

The None keyword is used to define a null value, or no value at all.

None is not the same as 0, False, or an empty string. None is a data type of its own (NoneType) and only None can be None.

```
if x:
    print("Do you think None is True?")
elif x is False:
    print ("Do you think None is False?")
else:
    print("None is not True, or False, None is just None...")
result None is not True, or False, None is just None...
```

nonlocal Keyword

The nonlocal keyword is used to work with variables inside nested functions, where the variable should not belong to the inner function.

Use the keyword nonlocal to declare that the variable is not local.

```
def myfunc1():
  x = "John"
  def myfunc2():
   x = "hello"
  myfunc2()
  return x

print(myfunc1())

result John
```

not Keyword

The not keyword is a logical operator.

The return value will be True if the statement(s) are not True, otherwise it will return False.

```
x = False
print(not x)
result True

x = 1
print(not x)
result False
```

or Keyword

The or keyword is a logical operator.

Logical operators are used to combine conditional statements.

The return value will be True if one of the statements return True, otherwise it will return False.

```
x = (5 > 3 or 5 > 10)
print(x)
result True

x = (5 < 3 or 5 > 10)
print(x)
result False
```

pass Keyword

The pass statement is used as a placeholder for future code.

When the pass statement is executed, nothing happens, but you avoid getting an error when empty code is not allowed.

Empty code is not allowed in loops, function definitions, class definitions, or in if statements.

```
for x in [0, 1, 2]: pass
```

Using the pass keyword in a function definition:

```
def myfunction():
   pass
```

Using the pass keyword in a class definition:

```
class Person: pass
```

Using the pass keyword in an if statement:

```
a = 33
b = 200
if b > a:
pass
```

Raise Keyword

```
x = -1
if x < 0:
  raise Exception("Sorry, no numbers below zero")</pre>
```

The raise keyword is used to raise an exception. You can define what kind of error to raise, and the text to print to the user.

return Keyword

The return keyword is to exit a function and return a value.

```
def myfunction():
  return 3+3
print(myfunction())
```

try Keyword

The try keyword is used in try...except blocks. It defines a block of code test if it contains any errors.

You can define different blocks for different error types, and blocks to execute if nothing went wrong,

while Keyword

The while keyword is used to create a while loop.

A while loop will continue until the statement is false.

```
x = 0
while x < 9:
print(x)
x = x + 1
```

yield Keyword

The yield keyword is used to return a list of values from a function.

Unlike the return keyword which stops further execution of the function, the yield keyword continues to the end of the function.

When you call a function with yield keyword(s), the return value will be a list of values, one for each yield.

```
def myFunc():
    yield "Hello"
    yield 51
    yield "Good Bye"

x = myFunc()

for z in x:
    print(z)
```