

Languages and methods of programming

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Home Work

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What Python Conceptual Hierarchy.



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1. Programs are composed of modules.
2. Modules contain statements.
3. Statements contain expressions.
4. Expressions create and process objects.



Name four of
Python's core
data types.



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Python's core
data types.

- Numbers

Example 1234, 3.1415, 3+4j,
0b111, Decimal(), Fraction()

- Strings

Example 'spam', "Bob's",
b'a\x01c', u'sp\xc4m'

Lists [1, [2, 'three'],
4.5], list(range(10))



Name four of
Python's core
data types.

- Dictionaries

Example `{'food': 'spam',
'taste': 'yum'},
dict(hours=10)`

- Tuples

Example `(1, 'spam', 4, 'U'),
tuple('spam'), namedtuple`



Name four of
Python's core
data types.

- Files

Example `open('eggs.txt'),`
`open(r'C:\ham.bin', 'wb')`

- Sets

Example `set('abc'), {'a',`
`'b', 'c'}`

- Other core types

Example Booleans, types,
None



Name four of
Python's core
data types.

- Program unit types
Example Functions, modules, classes
- Implementation-related types
Example Compiled code, stack
tracebacks

Popular programming languages

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How get Python's
help?



How get Python's
help?

```
s='spam'  
print(s)  
help(s.replace)
```



Missing Keys: if Tests

```
D = {'a': 1, 'b': 2, 'c': 3}
print (D)
D['e'] = 99
print (D)

#print(D['f'] )

# 'f' in D

if not 'f' in D:
    print('missing')
```



Sorting Keys: for Loops