

Python Journey

Requirements

- Python Environment
 - PATH
- Text Editor / Integrated Development Environment
 - Atom Sublime | Visual Studio Pycharm
- Note Book

Syntax & Keywords

1. Variables & Data Types

```
- int
- float/double
- string
- bool
- others
```

2. String

- \"
- .lower() .upper() str() len() .isalpha()

3. Lists & Dictionaries

```
array = [1, 4, 5, 3, 2]
array[0]
array[1:3]
array[:3]
array[1:]
len(array)
array.append()
array.index()
array.insert()
array.remove()
array.sort()

dictionary = {'key1' : 1, 'key2' : 'value'}
```

4. Operators

- Addition (+), Subtraction (-), Multiplication (*), Division (/)
- Exponentiation (**)
- Modulo (%)

5. File Input/Output

```
f = open('input.txt', 'w')
f.write('Hello')
f.close()

with open('output.txt', 'r') as ff
print ff.read()
ff.close()
print ff.closed
```

Conditionals & Loops

1. if ... else | if ... elif

```
if word is letter and not a == number:
    print 'true'
else:
    print 'false'
```

2. for | while continue break

```
while condition is true:
    print 'ah'
    num = 1
    if num == 1:
        break
```

Functions

Input & Output

```
#input
raw_input()
#output
print()
```

import

from module import function/object

- import math

```
import math
everything = math(dir)
print everything
sqrt = math.sqrt()
print sqrt
```

- from datetime import datetime

```
from datetime import datetime
now = datetime.now()
print(now)
```

- Built-In Functions

```
max()
min()
abs()
type()
```

Recursion

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To Be Continued

- SQL Connection
- Network
- Graphic User Interface
- Multiple Thread