

### Reference Docs

The Python Standard Library: <https://docs.python.org/3/library/>  
 Built-in functions: <https://docs.python.org/3/library/functions.html#dir>

### 'print()' Like a Pro

```
## 'sep' argument ##
print(1, 2, 3, sep="\n ")
# 1
# 2
# 3
## end argument ##
print( 'ad dress', end='@')
print( 'do mai n[.] com')
# addres s@d oma in[.]com
## repeat printing ##
print( " Pyt hon " * 3)
# Python Pyt hon Python
```

### Operators

```
# ternary operators
x = 'foo' if 2+2==5 else 'bar' # x = 'bar'
# walrus operator
```

### Misc

```
#eval()
exp = "2 + 2"
eval(exp) # 4
exp = " +".join([str(n) for n in range(9)])
print(exp) # '0+1+2 +3+ 4+5 +6+7+8'
eval(exp) # 36
```

### 'string' Like a Star

```
"AAABBBBB".count('C') # 4
" AAA BBC CCC ".index('B') # 3
" strip both sides ".strip() # 'strip both sides'
" strip left side ".lstrip() # 'strip left side '
" strip right side ".rstrip() # ' strip right side'
" /".join(['', 'path', 'to', 'somewhere']) #
/path/ to/ som ewhere
String Methods ref: https://docs.python.org/3/library/string.html#string-methods
```

### Lists

```
# basic list comprehension
# syntax: [exp for member in iterable (if conditional)]
[x for x in range(10) if x > 5] # [6, 7, 8, 9]
# nested list comprehension
[f"{ x}{ y}" for x in " ab" for y in " cd"] #
['ac', 'ad', 'bc', 'bd']
# slicing
# syntax: List[ Start Index : End Index(not inclusive) : Step ]
L1 = [0,1,2 ,3, 4,5 ,6, 7,8,9]
L1[4:7] # [4, 5, 6]
L1[:2] # [0, 2, 4, 6, 8]
L1[::-1] # [9, 8, 7, 6, 5, 4, 3, 2, 1, 0]
# unpacking
first, *middle, last = [0,1,2 ,3, 4,5 ,6, 7,8,9]
# first = 0
# middle = [1, 2, 3, 4, 5, 6, 7, 8]
# last = 9
```

### 'math' Like a Maniac

```
round(5.2) # 5
round(5.7) # 6
from math import floor, ceil
floor(5.2) # 5
ceil(5.2) # 6
abs(-5.2) # 5.2
min([1 ,2,3]) # 1
max([1 ,2,3]) # 3
sum([1 ,2,3]) # 6
```

