

Vocabulary

Variable	sth that can change
String	a list of characters
Integer number	Whole number/counting number
Float number	The number in decimal
Syntax	Grammar/Structure of language
Modulo	Find the remainder
Boolean	True/False

Print name

```
name = "time GIRARD"
print (name.upper()) > TIM GIRARD
print (name.lower()) > time girard
print (name.capitalize()) > Tim
girard
print (name.title()) > Tim Girard
```

Convert

```
word = str(3) #converts 3 to a string "3"
num = int("3.5") #converts "3.5" to an integer 3
num = float("3") #converts "3" to a float 3.0
```

Addition

string+string	combines the string together
string+number	crash
number+number	Math(addition)

Multiply

string*string	crash
string*number	combines the string multiple times
number*number	math(multiply)
string**number	crash

Random code

```
import random
mylist = ["Dog", "Fish", "Cat", "Bear"]
counter = 0
while counter < 10 :
    random_item =
random.choice (mylist)
    print (random_item)
    counter = counter + 1
```

Functions

print()	displays information on the screen
input()	receives info from the user
float()	converts a value to floating point
str()	converts

Example Code

```
mylists3 =[1, 'hello' , 2.5]
print (mylists)
print (mylists2)
print (mylists3)
#how to make a list with all numbers from 0-99
mynumbers = range(5)
for num in numbers:
print(num)
```

Naming Conversation

Rule for giving name

- letter
- numbers
- underscore

Valid name

- _myStr
- my3
- Hello_there

Invalid name

- 3my="hi" --cannot start with number
- first name="hi"
- first-name
- first+name

func: largenum

```
def max2(num1, num2):
    if num1 > num2:
        maxvalue = num1
    elif num2 > num1:
        maxvalue = num2
    return maxvalue
#function call
print(max2(92, 3))
print(max2(4, 5))
def max3(num1, num2, num3):
    maxvalue = num1
    if num2 > maxvalue:
        maxvalue = num2
    elif num3 > maxvalue:
        maxvalue = num3
    return maxvalue
#function call
print(max3(92, 5, 6))
print(max3(8, 9, 7))
print(max3(99, 40, 49))
def maxlist(list):
    maxvalue = list[0]
    for num in list:
        if num > maxvalue:
            maxvalue = num
    return maxvalue
mylist = 3, 5657, 90333, 33333333
print(maxlist(mylist))
```