phython note Cheat Sheet

by ppinkyy via cheatography.com/25758/cs/6874/

funtion

print	Show information on the screen
int	to tell that what you write is a number
float	change number to be decimal number
str	list of number, letter and symbol

Addition

str+str	the result combine together
str+ int or float	crash
int/float + int/float	math - addition

Multiplication and Exponents

string*string	crash
string*number	combine string together
number*number	math-multiply
number ** number	math-exponent
string ** string	crash
string**number	crash

Reverse Word

```
while True:
word = input("Please enter a word")
index = 0
reverse = ' '
while int(index) < len(word):
reverse = word[index] + (reverse)
index = int(index) + 1
print ("Reverse: ", reverse)
```

Convert to binary

```
numb = int(input('enter the number to convert to binary'))
bistring = ''
while numb>0 :
rem = numb%2
bistring = str(rem)+bistring
numb = numb//2
print ('Binary Number : ', bistring)
```

Naming Convention

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

Area of Circle

```
"""
Python Intro Assignment #2
name
student number
"""
#Ask the user for a radius of a circle
user_radius = input("What is a radius of a circle?")
#Convert the given radius to a floating point
radius = float(user_radius)
#Make a variable called pi
pi = float(3.1415)
#Calculate the area of the circle using exponents
area = pi(radius*2)
#Display the area of the circle to the user
print ("The area of the circle is", area)
```

example

Print (2) – integer
Print (2.5) – floating point
Print (“Hello”) – string
Print (mystr) – variable

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example (cont)

Print (mystr,"Hi",2,1.0) -- commas
mystr = "Hi"
mystr ← name
"Hi" ← value can change
print (int(1.5)) → 1
print (int("2")) → 2
print (float(1)) → 1.0 anything to a float
Modulo/Remainder %
print (4%2) → 0
print (30%7) → 2

fuction

```
def myprint(text) :
    print ('xxx'+str(text)+'xxx')
myprint (1)
```

xxx 1 xxx

Function (return number) Ex

```
def doubleIt (number):
    return number *2
print (doubleIt(2))
print (doubleIt('hello'))
myvar = doubleIt(doubleIt(3))
print (myvar)
```

4
hellohello
12

symbol

==	equal
!=	not equal
>	greater than
<	less than
>=	greater than or equal to
<=	less than or equal to

Vocabulary

variable	hold a value and can be change
string	a list of character such as number, letter and symbols
integer	a number without decimal
float	number in dicimal
syntax	structure of language
value	returns a list of all the values available in a given dictionary.
while	it's a loop that will go over and over until you stop it
loop	traditionally used when you have a piece of code which you want to repeat n number of times
input	Run the program. In the Shell you should see
print	to show information on the
modulo	leave remainder
#	Comment, no effect
randon.choice	program that someone wrote
import random	to get get a random program from someone
import	to import program from someone
import random + random.choice()	pick random item in the list
palindrome	is derived from the Greek palíndromos, meaning running back again

Guess word game

```
import random
#Create a list
guesslist = ['grape', 'orange', 'chloroplast', 'ribosome', 'lipstick']
chance = 3
score = 0
```

Guess word game (cont)

```
print (guesslist)
while chance != 0:
random_item = random.choice(guesslist)
user_input = input("Please guess a word: ")
if user_input == random_item:
print ("That's correct!")
score = score + 100
print ("Score:", score)
else:
if user_input not in guesslist:
print ("Sorry, that isn't even in the list!")
chance = chance - 1
print ("Chance Remaining:", chance)
else:
print ("Sorry, wrong choice!")
chance = chance - 1
print ("Chance Remaining:", chance)
if chance == 0:
print ("The word was", random_item)
print ("The score is", score)
```

Sort word per line

```
mystr = "Hello"
letter_num = 0
while letter_num < len(mystr):
print (mystr[letter_num])
letter_num = letter_num + 1
```

```
H
e
l
l
o
```

Print Name

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

fuction

```
def bacon():
    print ('bacon')
    print ('egg')
    print ('text')
    print ('gta')
    print ('guildwar')
    print ('magalodon')
    return
bacon()
bacon()
```

```
bacon
egg
text
gta
guildwar
magalodon
bacon
egg
text
gta
guildwar
magalodon
```

Example

```
def circlearea(r):
pi = 3.1415
area = pi*r*2
return area
r = input ('enter the radius of the circle : ')
r = float(r)
print ('the area of the circle is', circlearea(r))
```

```
enter the radius of the circle : 5
the area of the circle is 78.53750000000001
>>>
```

Example

```
def circlearea(r):
pi = 3.1415
area = pi*r*2
return area
r = input ('enter the radius of the circle : ')
r = float(r)
print ('the area of the circle is', circlearea(r))
```

```
enter the radius of the circle : 5
the area of the circle is 78.53750000000001
>>>
```