Cheatography

IFNpython Cheat Sheet

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Vocabulary

Variable	Holds a value and can be changed
String	A list of characters such as numbers, letters, symbols
Integer number	Whole number/Counting number (No decimal)
Float number	The number with decimal
Modulo	Find the remainder
Boolean	True/False
Syntax	Grammar/Structure of language
Function call	A call to use function
Argument/Parameter	Something you give to function
Function	Something that you can reuse the code

function 1

```
def aisha(text):
    print("" + str(text) + "")
    return
aisha(1)
aisha("hello")
aisha(1+2)
aisha("text")
def chung(text,decoration):
    print(decoration + str(text) + decoration)
    return
chung(123123213212, "++++")
chung("hello", "<<>>")
```

function area of circle

```
def areaOfCircle(r):
    if r<= 0:
        return "Error:radius <= 0"
    pi = 3.1415
    area = pi  r r #or pi r *2
    return area
user_radius = input("Enter the radius: ")
radius = float(user_radius)
print("The area of the circle is", areaOfCircle(radius))
```

Grade A Exam

```
theList = ["A","B","C","D"]
for item in theList:
    print(item)
whileList = ["E","F","G","H"]
s = 0
while s < len(whileList):
    print(whileList[s])
    s += 1
while True:
    user_input = input ("Enter the word: ")
    if user_input == "exit":
        break
    else:
        print(len(user_input))
def theFunction():
    while True:
        user_input = input ("Enter the word: ")
        if user_input == "stop":
            break
    return
theFunction()

def computeThis(a1,b2):
    return (a1*b2)
```

Grade A Exam (cont)

```
print (computeThis(4,8))
def finalFunction(string):
    print("*"+string+"*")
    return
finalFunction("Aisha")
```

Code

print (name.upper())	Make every letter capital case
print (name.lower())	Make every letter lower case
print (name.capitalize())	Make the first letter capital case
print (name.title())	Make the first letter and the letter after the space capital case

RANDOM

```
import random
# Create a list of integers
intlist =[1,2,3,4]
random_int = random.choice(intlist)
print(intlist,random_int)
# Create a list of floating point numbers
fplist = [1.0,1.2,1.4,0.5]
random_fp = random.choice(fplist)
print(fplist,random_fp)
# Create a list of strings
srtlist = ["Aisha","Eve","KamitoP","Sanya"]
random_srt = random.choice(srtlist)
print(srtlist,random_srt)
# Create a list of integer, floating point number and string
mylist = [1,2.5,"Aisha"]
random_item = random.choice(mylist)
```

RANDOM (cont)

```
print(mylist,random_item)
# Create a list of following
variables
myvar1 = 1
myvar2 = 2
myvar3 = 3
varlist = [myvar1,myvar2,myvar3]
random_var =
random.choice(varlist)
print(varlist,random_var)
```

Max Value Function

```
def max2(num1,num2):
    MaX = num2
    if num1 > num2:
        MaX = num1
    return MaX
def max3(num1,num2,num3):
    Max = num1
    if num2 > num1:
        if num2 > num3:
            Max = num2
    if num3 > num1:
        if num3 > num1:
            Max = num3
    return Max
first = input('Enter the first
number: ')
second = input('Enter the second
number: ')
third = input('Enter the thrid
number: ')
print("Max value of 2 value
is",max2(first,second))
print("Max value of 2 value
is",max3(first,second,third))
```

Reverse Word

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

Convert to binary

```
user_number = ' '
while user_number != ' 0 ' :
    user_number = input ("Enter a
number to convert to binary: ")
    number = int(user_number)
    binary_string = ' '
    while (number > 0):
        remainder = number%2
        binary_string =
str(remainder)+ binary_string
        number = number//2
    print ("Binary string is",
binary_string)
```

Palindrome 9/10

```
def isPalindrome(word):
    reverse = ""
    for item in word:
        reverse = item + reverse
    if reverse == word:
        return True
    else:
        return False

while True:
    user_word = input('What is the
word: ')
    length = len(user_word)
    if user_word == 'quit':
```

Palindrome 9/10 (cont)

```
        break
    else:
        print("Length of the word
is: ",(length))

        function_return =
isPalindrome(user_word)
        if function_return == True:
            print(user_word, "is a
palindrome")
        else:
            print(user_word, "is
not a palidrome")
```

Area of Triangle Function

```
def areaOfTriangle(base,height):
    return (1/2*base*height)
user_base = float(input('Enter the
base of triangle: '))
user_height = float(input('Enter
the height of triangle: '))
print ('The area of Triangle is:
',areaOfTriangle(user_base,user_hei
ght))
def volumeOfPrism(area,dept):
    return (area*dept)
user_dept = float(input('Enter the
dept of the Prism: '))
print ('The volume of Prism is:
',volumeOfPrism(areaOfTriangle(user
_base,user_height),(user_dept)))
```