Python Fundamentals

Print statement

print("Hi", 2, 3, sep=",", end="hehehe ")

# Keywords if else True False while not to be used for variable names etc

# Java, C, C++ are compiled language and Python in interpreted. Compilers and Interpreters convert code to binary. Compiler compiles all code together, Python line by line.

# Identifiers - name of variables

#Float Literal

float\_1 = 10.5

float\_2 = 1.5e2 # 1.5 \* 10^2

float\_3 = 1.5e-3 # 1.5 \* 10^-3

unicode = u"\U0001f600\U0001F606\U0001F923" # need to mention u in beginning for emoji

raw\_str = r"raw \n string" # r for raw string

Python Operators and Loops

import keyword

print(keyword.kwlist)

import random

print(random.randint(1,100))

help('modules')

# 0 will be excluded loop runs from 10 to 1

for i in range(10,0,-1):

print(i,curr\_pop)

While Else Loops – Else part always executes once while is done

Strings

String can be sliced

No item assignment

s[::-1] # Reverse string

print(s[6:0:-1]) # Reverse partial – right index greater than left

Deletion possible for entire string

'Pune' > 'pune' # Capital letter smaller than small

Len, max, mi, sorted

sorted('hello world', reverse=True)

['w', 'r', 'o', 'o', 'l', 'l', 'l', 'h', 'e', 'd', ' ']

s = 'hello world'

print(s.capitalize())

s.title()

s.upper()

'Hello Wolrd'.lower()

'HeLlO WorLD'.swapcase()

Count/Find/Index

'my name is nitish'.count('i')

'my name is nitish'.find('x') # Return -1 if not found

'my name is nitish'.index('x') # Returns error if not found

'my name is nitish'.endswith('ish')

'my name is nitish'.startswith('1my')

name = 'nitish'

gender = 'male'

'Hi my name is {1} and I am a {0}'.format(gender,name)

'nitish1234'.isalnum() # isalpha, isdigit, isidentifier

'hi my name is nitish'.split()

" ".join(['hi', 'my', 'name', 'is', 'nitish'])

'hi my name is nitish'.replace('nitish','campusx')

'nitish '.strip()

print(input.\_\_doc\_\_)

a = [1,2,3]

b = a[:]

a.append(4)

print(a) # 1,2,3,4

print(b) # 1,2,3

a is b # checks memory location and not value

a == b # checks value

# code

print(0.3 - 0.2)

print(0.3 - 0.2 == 0.1) # this will be False as python stores value in binary format