Day 2

Python is strongly and dynamically typed

Strongly typed means data type matters in Python

Dynamically means it will runtime its data type

#data structure

a = 2

b = 'CSK'

c = 'MI'

#data structure

#list

ipl = ['CSK', 'MI', 'RCB', 'LSG']

print(type(ipl))

#indexing

print(ipl[1])

#slicing

print(ipl[1:])

ipl[1] = 'KKR'

ipl.append('KKR') #add element at the end

ipl.insert(2,'MI') #insert element at particular index

ipl.extend([1,2]) # extent list with another list

ipl\_string = "CSK,MI,KKR,LSG"

ipl\_list= ipl\_string.split(",")

# method 2 to create list

ipl\_string = "CSK MI KKR LSG 1"

ipl\_list= ipl\_string.split(" ")

ipl\_string = "CSK,|MI,|KKR,|.LSG"

ipl\_list= ipl\_string.split(",|")

#method 3

python\_list = list('python ')

# to remove element at any index use pop..by default it removes last value

ipl.pop(2)

num = [1,2,3,5,4]

print(sum(num))

print(min(num))

#tuple

#dictionary

# sort a list

num.sort()

# to get the index of particular value

num\_str.index()

#list of list

list\_of\_list = [[1,2],[2,4],['Ankit','Rahul']]

ipl\_new=ipl

ipl\_copy=ipl.copy()

ipl=[[1,2],[3,4]]

#shallow copy

ipl\_copy=ipl.copy()

# from python console:

>>> 1+2.0

3.0

>>> type(1+2.0)

<class 'float'>

>>> 5/2

2.5

>>> 5//2

2

>>> 5.5//2.2

2.0

>>> round(2.67)

3

>>> round(2.67,1)

2.7

>>> round(2.672,2)

2.67

>>> round(2.12,1)

2.1

>>> 3%2

1

>>> 7%3

1

>>> 12%2

0

>>> abs(-2)

2

>>> abs(2)

2

>>> abs(-2.0)

2.0

>>> abs(2.0)

2.0

>>> 2\*\*3

8

>>> pow(2,3)

8

>>> pow(2,4)

16

>>> pow(2,-2)

0.25

>>> pow(2,4,2)

0

>>> 16%2

0

>>> pow(2,4,3)

1

>>> pow(2,10,3)

1

>>> 'aa'.upper()

'AA'

>>> a=2.0

>>> a.is\_integer()

True

>>> a=2.1

>>> a.is\_integer()

False

#data structures  
#list - it is group of value  
ipl = ['csk', 'mi','lsg','kxip']  
print(type(ipl))  
print(ipl[0:3])  
  
# lists are mutable  
ipl[1]= 'kkr'  
print(ipl[0:3])  
ipl.append('mi')  
print(ipl[0:])  
  
#method 1  
ipl.insert(2,'rcb')  
print(ipl[0:])  
ipl.extend([1,2])  
print(ipl[0:])  
print(ipl[0][0:2])  
print(ipl.insert(1,[3,4]))  
  
#method 2  
ipl\_string = "csk,kkr,rr,dd"  
ipl\_list = ipl\_string.split(",")  
print(ipl\_list[0:])  
  
#method 3  
python\_list = list('python')  
print(python\_list)  
  
print(ipl.pop(2))  
  
  
  
  
#tuple  
#dictionary