List

Agenda

⇒ Data Structure
⇒ List
⇒ Tupple
⇒ Str
⇒ Sets
⇒ Dict

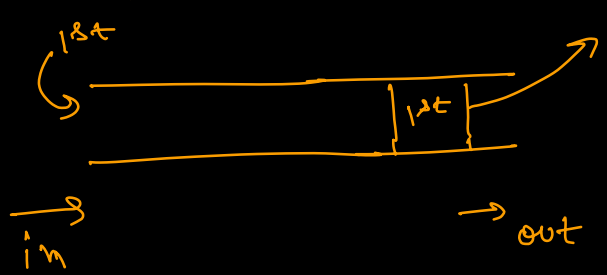
Data Structure

datatypes ⇒ int float complex
str Boolean

data structure is a way we can structure our data

① List = [_ , _ , _ , _ , _]

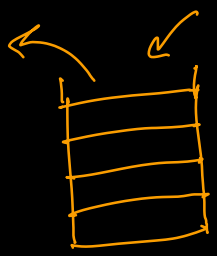
② Hands up

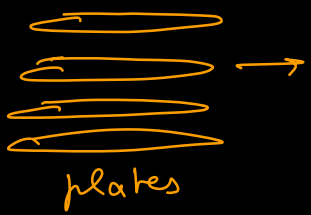


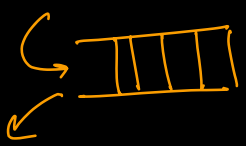
Queue

FIFO

③

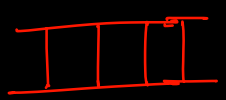


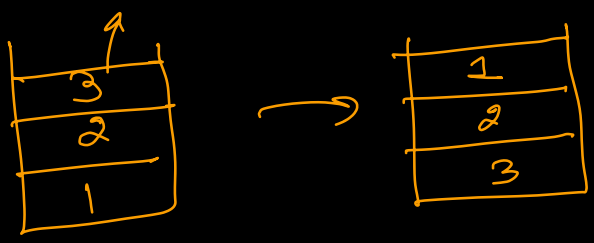




We are just shuffling our data

⇒ we are storing & accessing it in a particular order.

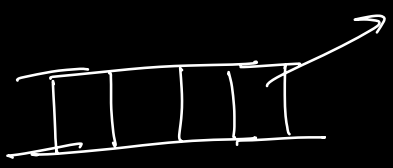




DS ⇒ Data Structures,

we have few algorithm or ~~things~~ techniques to do things quickly on this DS.

[Algorithm]

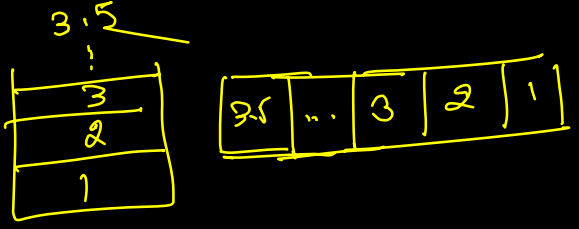


1 2 3 4 5 6, 3.5

⇒ we can make a structure & store this data ⇒ Data Structure

a = 1
b = 2
c = 3

li = [1, 2, 3, 4, 5, 6]



So, we have few algorithm to work on data as well as on this data structure. ⇒

Steps to do a task efficiently

List

List is actually a list ⇒ it can have multiple items under same name

Homogenous	Heterogenous
element of same type	element of diff type

List is a sequence / iterable

loops ≡ iterations

⇒ indexing & slicing works as it should

⇒ List store & maintain sequence

⇒ Lists are mutable

things can be added
things can be deleted
things can be modified

iterable vs sequence

⇓ ⇓

ordering is not maintained

it maintains order or seq

Functions vs Methods

⇓ ⇓

called on an object/ variable

need an object To get called on.

any vs all

any ⇒ Go to each item in a list (iterable)
& if any one of them
is true, say True
else False

all ⇒ Go to each item of a list
one by one & only
say True if all are
True.