\* collection : is grouping multiple items together and storing them with a single name called varible.

We use collection to orginaze data into varible and reduce the varibles name.

\* list : is simple collection that groups picies of data together in a order and assigne a collection name.

cities = [

'Tokyo',

'Dakar',

'Mumbai',

'Buenos Aires',

]

\_\_ element in list start with indx 0

\* dictionary : lets you to store related information

california\_symbols = {

'bird': 'California quail',

'animal': 'Grizzly bear',

'flower': 'California poppy',

'fruit': 'Avocado',

}

\_\_ to access element in dictionary california\_symbols[label]

\* Iterations : Repets the same procedure multiple times until it reaches to spicified endpoint.

\* loop :Code that iterates , moving from the beginning to end of the process,then starting over

\* for loop : keyword to loop on all items to endpoint

for spice in spices:

print(spice)

\*while loop: keyword to loop on all items to custom endpoint

while i <= 100:

print(i)

i += 5

\* Module :python files that containes code,like variables or functions

\* package or library : Using multiple Modules together so they are distributed and used in a group

\* framwork : when a set of code is not just used together but used in a specific way

\* concatenation: when multiple strings are combined into a single string.

value = 50

print(value + ' is my favorite number!')

\* Capitlization(): to convert the first char in string to capitalization.

first\_name = "mostafa"

first\_name\_cap = first\_name.capitalize()

\* find(): to cheack if a word "award:" in string or not if exit return indx of first char in

a word or if not return -1.

note = 'award: Nobel Peace Prize'

award\_location = note.find('award: ')

\* Regular expritions: Allows you to create a description of a Pattern that you want to Match