Python lists, Tuples, sets collection. Single variable used to Store Multiple values List = C ] orderd, change able and doublicate de Fruits= ["apple"; "orange", Banana", "Coconut"] fruits[i] - To gd The element with the referred index from i=0 to i=3 Fruits [: 1 ] if Step = -1 it will reverse and enfruits): return Length of list [2] "variable" in fruits \_ returs True if the variable in The List 3) fruits-append (" ")! False otherway To add element in the end of 1:St 4 fruits remove !" " : delete element 5) fruits insert (index, " "): add element in clesived index [6] Prits-Sort (): Sort elements 7 Fruits reversel): reverse elements. 8 Fruits. cleare): clean all the list Glfruits. index (""): returns index of the relement To fruits. count (" "). returns The number of occurance of This parthocelement (Views)

la de me

Set = 23 unordered and immutable, but Add Remove OK. No doublicates Fruits = [ "apple" , "orange", "banano", "coconut" } Print (fruits): Print elements in different order every Time We con't Use (fruits.indexcs / Fruits [i]) Mfruits add (" ") المقدر عن استفرع اي داله فيما Ofruits. remove ("") (index wol is Gog) -3 Fruits Pop () : delete arandom element لانساسى مسرسين وملماس علاقص شنب دخول المونا صوالل است Tuple = (): ordered and un Urangeable. Duplicates or Paster Fruits = ( "apple", "orange"; banana", "coconut") MARS PRIORE) Print (fruits): Print element with 1-1 lapple! we don't have many methods. in Fruits 2 Fruits index (" ") 3 Fruits · Count [ " ") RECOS



Fruits = [] grocories = [fruits, oranges, meats] Oggtubles = [] meats = [] To make 2D list we use more than one 1D List First list represent first row First element in every list. Will represent first column. To deal with 20 list we use nested For collection in growies We can do to for food in Collection: 2D Tuple; set [25] dictionarry: a collection of Jalues Pairs ordered and Changeable. No doublicates ? Key: value} Capitals = 2 "USA" = Washington D.C", "Russia": " Moscow" } Some methods T) Capitals - get ("USA"): returns the value with 7 capitals - get (" 1 7") : it returns None cariable doesn't [2] capitals-update ( = "Germany": "Berlin") we use.
it add new element or change exist element "Capitals. Update ( ? "USA": " Dectorit") (3) Capitals . Pop ("China") : To remove element (4) Capitals. Popitem ( ): remove latest Key value. 5/ Capitals- Clear ( ): remove all elements 6) capitals-Keys (): will return Keys dict-Kays (['usA'. F) Capitals - Values () - dict - Values Fiwas 2 'MOS-1] Nieon

(8) capitals item() : will return our dictionary as 2D TuPle dict-items ([('USA' = 'Wasgnton'D.c'), ('Russia', 'Moscow')) To Jenerate arandom number we need to import random. > random. randint (65): return random number between 156 random. random () : return float number between 0,1 3) > rondom · Choice(p): Choose value from a Collection Tiple or list or set (4) random. Shuffle(): Shuffle a collection and return 31 P Functions. Function: Ablock of reusable code name solef happy (): To invoke it name () you can't add argument by def name (name): To in voke Function you need to guse mortching number of orguments and in The same order > return = Statement used to end afunction and send a result back to the caller



rint(" 13") "2")"5", "4", "5" , Seps "- ") 1-2-3-4-15 default argument: default value of a certain Parameter it is used when argument omitted def het Price ( List - Price, discount, tax) without defut def enel Price (List-Price, discount-0, tax=-05) defualt value of argument Two aski imicz leto net-Price (List-Price) or net-Price (List-Price, discount). importantnate: or all ( any default orgument should be wrotten after Pasitional orgument) To make your function flexiable reduce number of arguments 1337 > Keyword argument : an argument Preceded by an identifier heifs with readability, order doesn't matter def hello (greeting, title, first, Last) hello ( "Hello", title="Mr.", Last = " Bltohomy ", First = "Mohomed") Hello Mr Mohamed eltohame. -> Positional orguments 5 hould be written before keyword argument Nego

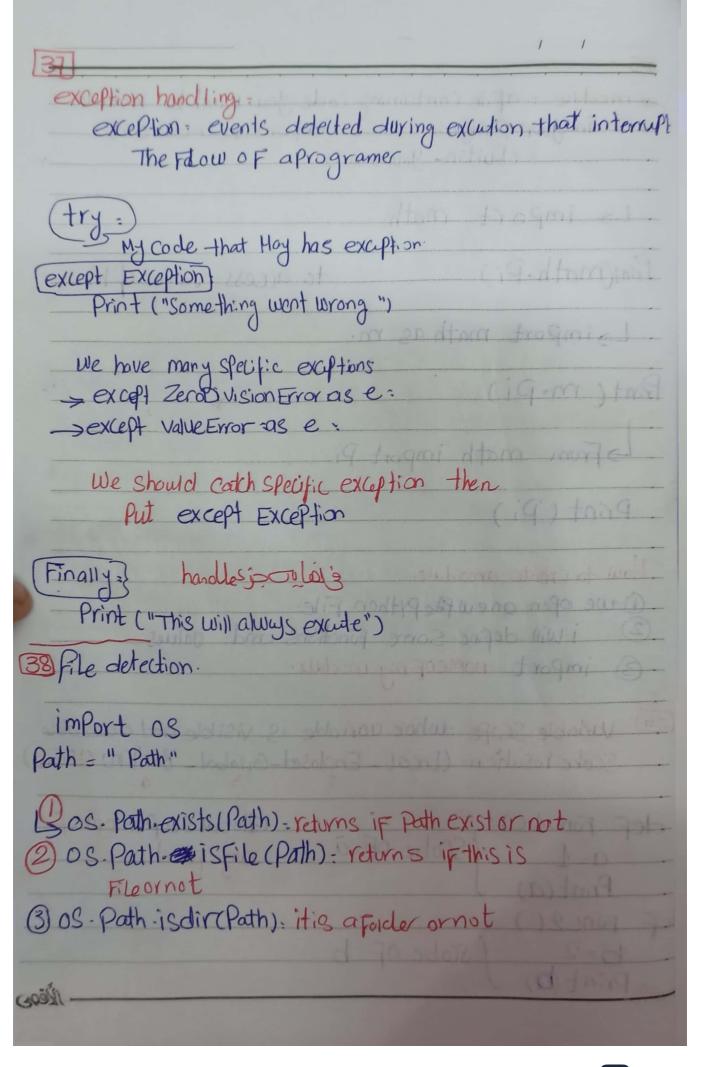


[34] the \*args: allows you to pass multiple non-key orguments.

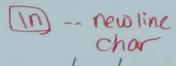
die \*\* kwargs: allows you to pass multiple keyword - arguments \*unPacking operators -sdef (a, b) Positional. redurn atb Print (add(1,2)) > is a Tuple def (\*args): For arg in args. this can take too many arguments Total + = arg return total - and dictionary. de F Print\_address (\*\* kworgs): \*\* Kwargs Should Follow \*args Kworgs, gel ('\_-')
Prome of orgunent (GOS)

module: afile containing code you want to include in your program Use 'impor' to include it (buitin- your own) 1> import math. Print(math. Pi) to access value of Pi Lyimport math as m. Print (m. Pi) 15 From math import Pi Print (Pi) How to create amodule. 1) we open onew Repython File. i will define some Functions and values 3) import name of my module. variable Scope: where variable is visible and accessable Scale resultion - (Local - Enclosed-Gilobal - Builtin) (LEGB Global Scope: out of. def Func1(): Scobe of a any fundion Print(a) F FUNL2() Scobe of b









By Python read a File.	
	1
· with open ('text. txt') as File:	
LiF this in the Folde of Project	8
iFnot We need to Write Path of File.	- 0
Print (File read()) -> This method closed File automatically	
-> File. closed == : returns if File Closed or open.	0
40 Python write a file	
· text = " 1 jiytext	
With open ('file Poth') 'w') asfile. I this override my File write (text) text	1
File write (text) J text	4
(with open ('File Path', 10') as File.) _ To append	
rast text	
Copy File () : copy contents of a File	
(2) copy (): copy File+ Per mission mode + destination can be	
3 a dictionaly	
Blopy2(): copy()+Copies metalata (File's creation and	
modification times)	
bimport ShutiL	
Shutil - copyFile ('Path of Src', 'Path of dist')	
	*************
Mean Mean	_



