DAY 9

DICTIONARIES

SYNTAX:

Dictionary = {key:value}

EXAMPLE:

programming\_dictionary = {  
 "Bug": "An error in a program that prevents the program from running as expected.",  
 "Function": "A piece of code that you can easily call over and over again."  
}  
print(programming\_dictionary["Bug"])

OUTPUT:

An error in a program that prevents the program from running as expected.

ADDING A NEW PAIR TO THE EXISTING DICTIONARY:

programming\_dictionary["loop"] = "the action of doing something repeatedly."  
print(programming\_dictionary)

OUTPUT:

{'Bug': 'An error in a program that prevents the program from running as expected.',

'Function': 'A piece of code that you can easily call over and over again.',

'loop': 'the action OF doing something repeatedly.'}

TO WIPE A EXISTING DICTIONARY:

programming\_dictionary = {  
 "Bug": "An error in a program that prevents the program from running as expected.",  
 "Function": "A piece of code that you can easily call over and over again."  
} #existing dictionary

programming\_dictionary = {}

print(programming\_dictionary)

OUTPUT:

{}

CHANGING THE VALUE OF EXISTING KEY IN A DICTIONARY:

programming\_dictionary["Bug"] = "an insect"  
print(programming\_dictionary)

OUTPUT:

{'Bug': 'an insect',

'Function': 'A piece of code that you can easily call over and over again.',

'loop': 'the action of doing something repeatedly.'}

LOOPING:

for key in programming\_dictionary: #key refers to the key value in the dictionary  
 print(key)

OUTPUT: # Only the key values are printed

Bug

Function

Loop

TO PRINT KEY AND VALUE:

for key in programming\_dictionary:  
 print(key)  
 print(programming\_dictionary[key])

OUTPUT:

Bug

an insect

Function

A piece of code that you can easily call over and over again.

NESTED DICTIONARY AND LISTS:

EXAMPLE:

travel\_log = {  
 "France": ["Paris", "Lille", "Dijon"],  
 "Germany": ["Stuttgart", "Berlin"],  
}  
print(travel\_log)

OUTPUT:

{'France': ['Paris', 'Lille', 'Dijon'], 'Germany': ['Stuttgart', 'Berlin']}

EXAMPLE:

nested\_list = ["A", "B", ["C", "D"]]  
print(nested\_list[2][1])

OUTPUT:

D

EXAMPLE:

travel\_log = {  
 "France": {  
 "cities\_visited": ["Paris", "Lille", "Dijon"],  
 "total\_visits": 12  
 },  
 "Germany": {  
 "cities\_visited": ["Berlin", "Hamburg", "Stuttgart"],  
 "total\_visits": 5  
 },  
}  
print(travel\_log["Germany"]["cities\_visited"][2])

OUTPUT:

Stuttgart

EXAMPLE:

dict = {  
 "a": 1,  
 "b": 2,  
 "c": 3,  
}  
dict[1] = 4

print(dict)

OUTPUT:

{'a': 1, 'b': 2, 'c': 3, 1: 4}

TO RETRIEVE THE MAXIMUM VALUE’S KEY FROM DICTIONARY:

EXAMPLE:

fruits = {“apple”: 34, ” beets”:78, ”carrot”: 43}

max(fruits , key=fruits.get)

OUTPUT:

“carrot”