Assignment-2

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1:Write a program that takes two strings from the user: first\_name, last\_name. Pass these variables to fullname function that should return the (full name). o For example: First\_name = “your first name”, last\_name = “your last name”

▪ Full\_name = “your full name”

A:

def getFullName(firstName,lastName):

    return firstName + ' ' + lastName

first\_name = input("enter first name :")

last\_name = input("enter last name : ")

print("Full name : ",getFullName(first\_name,last\_name))

enter first name : karthik

enter last name : bathula

Full name : karthik bathula

2:Write a python program to find the wordcount in a file (input.txt) for each line and then print the output. o Finally store the output in output.txt file.

Example: Input: a file includes two lines:

Python Course

Deep Learning Course

Output: Python Course

Deep Learning Course

Word\_Count:

Python: 1

Course: 2

Deep: 1

Learning: 1

A:

input\_filename = "input.txt"

output\_filename = "output.txt"

try:

    with open(input\_filename, 'r') as input\_file:

        lines = input\_file.readlines()

        word\_counts = {}

        for line in lines:

            line = line.strip()  # Remove leading/trailing whitespace

            words = line.split()

            for i in range(len(words)):

                if words[i] in word\_counts:

                    word\_counts[words[i]] += 1

                else:

                    word\_counts[words[i]] = 1

        with open(output\_filename, 'w') as output\_file:

            for key in word\_counts:

                output\_file.write(f"{key}\t : {word\_counts[key]}\n")

except FileNotFoundError:

    print(f"File '{input\_filename}' not found.")

except Exception as e:

    print(f"An error occurred: {e}")

Input:

Hello professor

Professor this is karthik

Output:

Hello : 1

professor : 1

Professor : 1

this : 1

is : 1

karthik : 1

1. Write a program, which reads heights (inches.) of customers into a list and convert these heights to centimeters in a separate list using:
2. Nested Interactive loop.
3. 2) List comprehensions

Example: L1: [150,155, 145, 148]

Output: [68.03, 70.3, 65.77, 67.13]

A:

def inches\_to\_cm(inches):

    return inches \* 2.54

no\_customers = int(input("Enter the no of customers: "))

heights\_inches = []

for i in range(no\_customers):

    height = float(input(f"Enter height in inches for customer {i+1}: "))

    heights\_inches.append(height)

height\_to\_cm = []

for height\_inch in heights\_inches:

    height\_cm = inches\_to\_cm(height\_inch)

    height\_to\_cm.append(height\_cm)

print(height\_to\_cm)

# usning list comprehension

num\_customers\_l = int(input("Enter the number of customers: "))heights\_inches\_l = [float(input(f"Enter height in inches for customer {i+1}: ")) for i in range(num\_customers\_l)]

heights\_cm = [inches\_to\_cm(height\_inch) for height\_inch in heights\_inches\_l]

print(heights\_cm)

Enter the no of customers: 1

Enter height in inches for customer 1: 120

[304.8]

Enter the number of customers: 2

Enter height in inches for customer 1: 123

Enter height in inches for customer 2: 124

[312.42, 314.96]