# Neural Networks & Deep Learning - ICP-2

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GitHub Link: <https://github.com/Abrar2456/ICP2.git>

Video Link: https://drive.google.com/file/d/1zbMG2zcRE8Fcbp\_QRFC4eYV1Z30h2j-z/view?usp=sharing

**Task 1A:**

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 The provided Python code defines a function full\_name that takes two parameters,

first\_name and last\_name, concatenates them with a space in between, and returns the

full name.

o The script then checks if it is being executed as the main program using the if \_\_name\_\_

== '\_\_main\_\_': construct.

o If true, it prompts the user to input their first and last names, calls the full\_name

function with the provided inputs, and prints the resulting full name.

A close-up of a computer screen

Description automatically generated

• **Task 1B:**

You need to create a function named “string\_alternative” for this program and call it from main

function.

A white rectangular object with text

Description automatically generated

• **Task 2:**

Write a python program to find the wordcount in a file (input.txt) for each line and then print the

output. Finally store the output in output.txt file.

o The provided Python code reads the content of a file named 'input\_file.txt', splits the

text into words, and initializes an empty list called 'check'.

o It then opens a new file named 'output\_file.txt' for writing.

o The code iterates through the words in the input file, checks if each word has already

been encountered (using the 'check' list), and if not, appends it to the list.

o For each unique word, it writes a line to the output file containing the word and its

count (number of occurrences) in the original text. o Finally, it opens and reads the content of the 'output\_file.txt' to display the word counts.

A computer screen shot of a program

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**Task 3:**

Write a program, which reads heights (inches.) of customers into a list and convert these heights

to centimeters in a separate list using: 1) Nested Interactive loop. 2) List comprehensions.

o The provided Python code defines a function named “convert\_heights\_nested\_loop”

that takes user input for the number of customers and utilizes a nested interactive loop

within a list comprehension to collect the heights in inches from the user.

o It then calculates the corresponding heights in centimeters using the conversion factor

of 2.54 and stores both lists.

o In the main block, the script calls this function, prints the heights in inches and

centimeters, demonstrating the conversion from inches to centimeters for each

customer.

A screenshot of a computer program

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**THE END**