

NNDL ICP2

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GitHub Link: https://github.com/sravanilankala/NNDL_ICP2_Fall23

Video Link: https://drive.google.com/file/d/1TvUvH0SBA3ZoMaeCIbTKJP_1KrSm7HD/view?usp=sharing

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).

For example:

- First_name = "your first name", last_name = "your last name"
- Full_name = "your full name"

Write function named "string_alternative" that returns every other char in the full_name string.

Str = "Good evening"

Output: Go vnn

Note: You need to create a function named "string_alternative" for this program and call it from main function.

The screenshot shows a Jupyter Notebook titled "700746285_NNDL_ICP2 (3).ipynb". The left sidebar displays a file explorer with a folder named "sample_data" and files "input.txt" and "output.txt". The main area contains a code cell with the following Python code:

```
# 1a. Write a program that takes two strings from the user: first_name, last_name. Pass these variables to fullname func
# For example:
# First_name = "your first name", last_name = "your last name"
# Full_name = "your full name"

# Ask user to provide first name and last name
last_name = input("Enter your last name: ")
first_name = input("Enter your first name: ")

# Fullname is a function which takes 2 parameters first_name and last_name
def Fullname(first_name, last_name):
    Full_name = first_name + " " + last_name
    return Full_name

# call 'Fullname' function and pass variables
Full_name = Fullname(first_name, last_name)

# Print the output as fullname
print("Full name: ", Full_name)
```

Below the code cell, the output is displayed:

```
Enter your last name: Lankala
Enter your first name: Sravani
Full name:  Sravani Lankala
```

```
[ ] # 1b. Write function named "string_alternative" that returns every other char in the full_name string.
# Str = "Good evening"
# Output: Go vnn
# Note: You need to create a function named "string_alternative" for this program and call it from main function.

# Define Fullname as function which takes 2 parameters first_name and last_name
def Fullname(first_name, last_name):
    Full_name = first_name + " " + last_name
    return Full_name

# Define 'string_alternative' as function which takes input and slices with a step of 2
def string_alternative(input_string):
    return input_string[::2]

# Ask user to provide first name and last name
last_name = input("Enter your last name: ")
first_name = input("Enter your first name: ")

# Function call with user provided first_name & last_name
Full_name = Fullname(first_name, last_name)

# string_alternative function is used to extract alternative chars from fullname
alternating_chars = string_alternative(Full_name)

# Print output as full name and alternate chars
print("Full Name: ", Full_name)
print("Alternating Characters: ", alternating_chars)
```

Enter your last name: Lankala
Enter your first name: Sravani
Full Name: Sravani Lankala
Alternating Characters: SaaiLnaa

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.

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

The screenshot shows a Jupyter Notebook titled "700746285_NNDL_ICP2 (3).ipynb". The left sidebar displays a file explorer with "sample_data", "input.txt", and "output.txt". The main code cell contains a Python script that reads "input.txt", counts word frequencies, and writes the results to "output.txt". The output file shows the following content:

```
1 Python Course
2
3 Deep Learning Course
4 Word_Count:
5 Python:1
6 Course:2
7 :1
8 Deep:1
9 Learning:1
10
```

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

Example: L1: [150,155, 145, 148]
 Output: [68.03, 70.3, 65.77, 67.13]

The screenshot shows a Jupyter Notebook titled "700746285_NNDL_ICP2 (3).ipynb". The left sidebar displays a file explorer with "sample_data", "input.txt", and "output.txt". The main code cell contains a Python script that reads a list of heights (L1) and converts them to centimeters (L2) using a nested loop. The output of the program is shown below the code cell:

```
[367.5, 379.75, 355.25, 362.6]
[367.5, 379.75, 355.25, 362.6]
```