

ICP2

GITHUB LINK : <https://github.com/venujala/700766038>

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.



```
def fullname(first_name, last_name):
    full_name = first_name + " " + last_name
    return full_name

def string_alternative(full_name):
    # Extract every other character starting from index 0
    alternate_chars = full_name[::2]
    return alternate_chars

# Main program
if __name__ == "__main__":
    # Input from user
    first_name = input("Enter your first name: ")
    last_name = input("Enter your last name: ")

    # Get the full name
    full_name = fullname(first_name, last_name)
    print("Full Name:", full_name)

    # Get every other character in the full name
    alternate_string = string_alternative(full_name)
    print("Alternate characters:", alternate_string)
```

Enter your first name: Good
Enter your last name: Evening
Full Name: Good Evening
Alternate characters: Go vnn

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

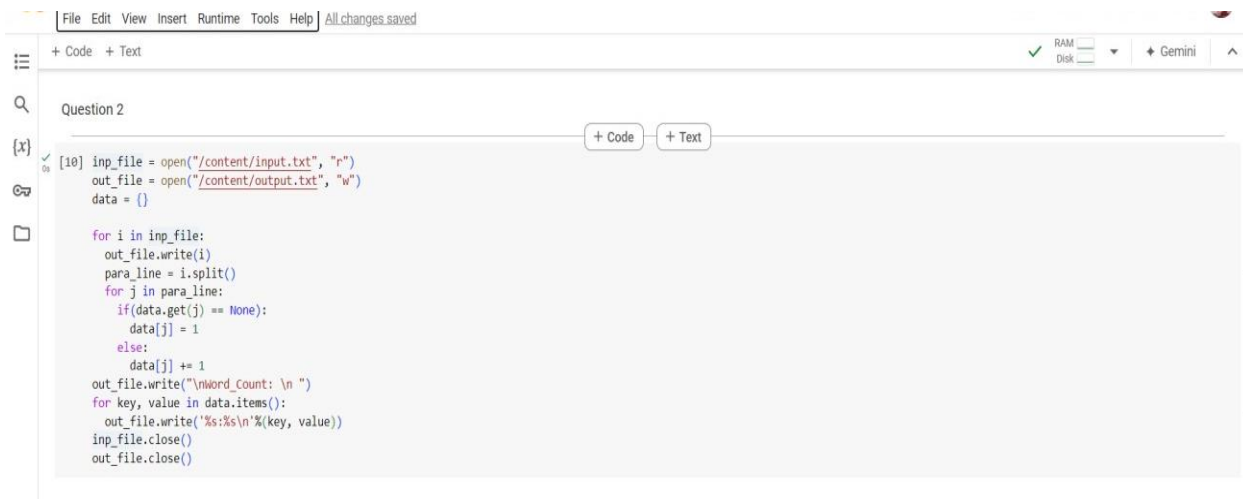
Word_Count:

Python: 1

Course: 2

Deep: 1

Learning: 1



The screenshot shows a code editor with a menu bar (File, Edit, View, Insert, Runtime, Tools, Help) and a status bar (All changes saved). The editor has tabs for '+ Code' and '+ Text'. The code is as follows:

```
[10] inp_file = open("/content/input.txt", "r")
out_file = open("/content/output.txt", "w")
data = {}

for i in inp_file:
    out_file.write(i)
    para_line = i.split()
    for j in para_line:
        if(data.get(j) == None):
            data[j] = 1
        else:
            data[j] += 1
    out_file.write("\nWord_Count: \n ")
for key, value in data.items():
    out_file.write('%s:%s\n'%(key, value))
inp_file.close()
out_file.close()
```

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 interface. At the top, there's a toolbar with '+ Code' and '+ Text' buttons. Below that, the notebook is titled 'Question 3'. The code cell contains a Python program that defines a function 'InchtoCentimeters' and uses it to process a list of heights. The program prompts the user for the number of elements and then for each height. The output shows the converted heights in centimeters.

```
[13] def InchtoCentimeters(value):  
    return value*2.54  
  
cust_heights = []  
centi_heights = []  
listelements = int(input('Enter number of elements in the list: '))  
for i in range(listelements):  
    element = int(input('Enter the height: '))  
    cust_heights.append(element)  
for ele in cust_heights:  
    value = int(ele)  
    centi_heights.append(InchtoCentimeters(value))  
print("Heights in centimeter: ", centi_heights)
```

Enter number of elements in the list: 4
Enter the height: 150
Enter the height: 155
Enter the height: 145
Enter the height: 148
Heights in centimeter: [381.0, 393.7, 368.3, 375.92]