

# Neural Networks and Deep Learning - ICP-2

Nirmala Yarlagadda

700733102

1. Write a program that takes two strings from the user: first name, last name. Pass these variables to full name function that should return the (full name).

Write function named “string alternative” that returns every other char in the full\_name string.

ICP-2 Neural Networks & Deep Learning

## Question 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).

Write function named “string\_alternative” that returns every other char in the full\_name string.

```
In [6]: def string_alternative(var1):  
        return var1[::2]  
first_name = input() #Enter the first name  
last_name = input() #Enter the last name  
full_name=(first_name + " " + last_name)  
print(full_name)# printing the full name  
string_alternative(full_name)
```

```
nirmala  
yarlagadda  
nirmala yarlagadda
```

```
Out[6]: 'nraayraad'
```

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.

## Question 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.

```
In [1]: import re
count = {}
read_text = open('input.txt', 'r')
string_text = read_text.read().lower()
pattern = re.findall(r'[a-z]{1,12}', string_text)
for word in pattern:
    count_words = count.get(word,0)
    count[word] = count_words + 1

count_list = count.keys()
for words in count_list:
    print(words, count[words])
```

```
input 1
a 1
file 1
includes 1
two 1
lines 1
python 1
course 2
deep 1
learning 1
```

3. Write a program, which reads heights (inches.) customers into a list and convert these heights to centimeters in a separate list using:

- 1) Nested Interactive loop.
- 2) [List comprehensions](#)

### Question 3

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

```
In [5]: print("Enter the height in inches:")
heightinch_list = input()
print("Nested interactive loop")
heightinch_list1 = heightinch_list[:]
cm_list1 = []
for height1 in heightinch_list1.split(','):
    height1 = float(":{:.2f}".format(float(height1) * 0.39))
    cm_list1.append(height1)
print(cm_list1)

print("List comprehensions")
heightinch_list2 = heightinch_list[:]
cm_list2 = [float(":{:.2f}".format(float(height2) * 0.39)) for height2 in heightinch_list2.split(',')]
print(cm_list2)

Enter the height in inches:
6,7,5
Nested interactive loop
[2.34, 2.73, 1.95]
List comprehensions
[2.34, 2.73, 1.95]
```

GitHub link: <https://github.com/niryarjessy22/Neural-Networks-and-Deep-Learning---ICP-2.git>

Video link:

[https://drive.google.com/file/d/14aecGgrguvHdBKpTYLyRd6xUtCniUcDe/view?usp=share\\_link](https://drive.google.com/file/d/14aecGgrguvHdBKpTYLyRd6xUtCniUcDe/view?usp=share_link)

