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NEURAL NETWORK AND DEEP LEARNING ASSIGNMENT-2

GITHUB LINK: - https://github.com/aknomula/NNAssignment2.git

RECORDINGLINK:
https://drive.google.com/file/d/1rPFaz2mqD7_wemXdGhOZ6ChoB9VUqeK2/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)**

a) **For example: ▪ First_name = "your first name", last_name = "your last name" ▪ Full_name = "your full name"**

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

first_name = "Akhila"
last_name = "Reddy"

print("Full Name:", fullname(first_name, last_name))
```

Output: -

```
Full Name: Akhila Reddy
```

b) **Write function named "string_alternative" that returns every other char in the full_name string. Str = "Good evening" Output: Go vnn**

```
def str_alternative(Str):
    return Str[::2]

print(str_alternative("Good evening"))
```

Output: -

```
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.**

```
text = open("input.txt", "r")
d = dict()
for line in text:
  line = line.strip()
  line = line.lower()
  words = line.split(" ")
  for word in words:
    if word in d:
      d[word] = d[word] + 1
    else:
      d[word] = 1
file1 = open('output.txt', 'w')
s=""
for key in list(d.keys()):
     s += key+ ":" + str(d[key])+ "\n"
file1.write(s)
file1.close()
```

Output: -

input.txt × output.txt

```
1 Python Course
2 Deep Learning Course
```

input.txt output.txt ×

```
1 python:1
2 course:2
3 deep:1
4 learning:1
```

3) **Write a program, which reads heights (inches.) of customers into a list and convert these heights to centimeters in a separate list using: Example: L1: [150,155, 145, 148]**

a) **Nested Interactive loop**

```
heights = [150, 155, 145, 148]
centimeters = []

for height in heights:
    cm = height * 2.54
    centimeters.append(cm)

print("Heights in inches:", heights)
print("Heights in centimeters:", centimeters)
```

Output: -

```
Heights in inches: [150, 155, 145, 148]
Heights in centimeters: [381.0, 393.7, 368.3, 375.92]
```

b) List comprehensions

```
heights = [150,155, 145, 148] # sample list of heights in inches
centimeters = [round(height * 2.54, 2) for height in heights] # convert each height in inches to centimeters

print("Heights in inches:", heights)
print("Heights in centimeters:", centimeters)
```

Output: -

```
Heights in inches: [150, 155, 145, 148]
Heights in centimeters: [381.0, 393.7, 368.3, 375.92]
```