# NEURAL NETWORK –ICP#2

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**Github LINK:**

**https://github.com/PAVAN1234567890145/ICP-2**

**Video Link:(Video in Github)**

## QUESTION-1:

```
def fullname(first,last):  # Takes two parameters first and last names
  return f"{first}{last}"  # concatenation of first and last names
def string_alternative(full_name):
  return full_name[::2]   # takes full_name parameter and form new string
first =input("Enter fisrt Name:")
last = input("enter Last Name:")
full_name = fullname(first,last) # Calling fullname
print("Complete Name:",full_name)
output = string_alternative(full_name) # calling the alternative string
print("output:",output)
```

```
Enter fisrt Name:Dakul phani pavan
enter Last Name:Dasari
Complete Name: Dakul phani pavanDasari
output: Dklpaipvnaai
```

# QUESTION-2:

```
f = open("input.txt","w")   # creating a file
f.write("Python Course\n")
f.write("Deep Learning Course\n")
f.close()
f= open("input.txt","r")  # reading a file
print(f.read())
```

```
Python Course
Deep Learning Course
```

```
from collections import Counter  # importing the file
with open('input.txt', 'r') as file:   # opening the file
    lines = file.readlines()  # read all lines of the files
word_per_line = []
for line in lines:
    words = line.strip().split() # split() used to split the words # removes the white spaces
    word_per_line.append(Counter(words)) # uses the counter to count the occurance of each word
for line in lines:
    print(line.strip()) # print the lines after white space removing
print("Word_Count:") # print the word count
for word, count in Counter(word for wc in word_per_line for word in wc).items():
    print(f"{word}: {count}")
with open('output.txt', 'w') as output_file:
    for line in lines:
        output_file.write(line)
    output_file.write("Word_Count:\n") # stores the output in output.txt file
    for word, count in Counter(word for wc in word_per_line for word in wc).items():
        output_file.write(f"{word}: {count}\n")
```

```
Python Course
Deep Learning Course
Word_Count:
Python: 1
Course: 2
Deep: 1
Learning: 1
```

# QUESTION-3:

```python
def convert_heights(heights_inches): # takes the heights in inches
    return [round(height * 2.54, 2) for height in heights_inches] # convert height inches to cm
num_cust = int(input("No.of customers: "))
heights_inches = [float(input(f"Enter height in inches for customer {i + 1}: ")) for i in range(num_cust)]
heights_cm = convert_heights(heights_inches)
print("Heights in Centimeters:", heights_cm)
```

```
No.of customers: 4
Enter height in inches for customer 1: 150
Enter height in inches for customer 2: 155
Enter height in inches for customer 3: 160
Enter height in inches for customer 4: 165
Heights in Centimeters: [381.0, 393.7, 406.4, 419.1]
```