Neural Networks and Deep Learning – ICP-2

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GitHub link:

https://github.com/kartikanumolu1/Neural-Assignment-2.git

Video Link:

https://drive.google.com/file/d/1X56ErXuglTitXCw5kaDOZtOLQ3Tfp5rk/view?usp=drive_link

Question 1 Output:

In [6]:
```
def fullname(first_name, last_name):
    return first_name + " " + last_name

def string_alternative(full_name):
    return full_name[::2]

def main():
    first_name = input("Enter your first name: ")
    last_name = input("Enter your last name: ")
    full_name = fullname(first_name, last_name)
    result_string = string_alternative(full_name)
    print("Full Name:", full_name)
    print("Every other character in full name:", result_string)

main()
```

```
Enter your first name: kartik
Enter your last name: anumolu
Full Name: kartik anumolu
Every other character in full name: kri nml
```

Question 2 Output:

In [7]:
```
sample_text = """This is kartik Neural Network course Machine learning course"""

with open('input.txt', 'w') as file:
    file.write(sample_text)

with open('input.txt', 'r') as file:
    lines = file.readlines()

word_counts = {}
for line in lines:
    words = line.split()
    for word in words:
        word_counts[word] = word_counts.get(word, 0) + 1

print("Input:")
for line in lines:
    print(line.strip())
print("Word count:")
for word, count in word_counts.items():
    print(f"{word}: {count}")

with open('output.txt', 'w') as output_file:
    output_file.write("Input:\n")
    for line in lines:
        output_file.write(line)
```

```
    output_file.write("Input:\n")
    for line in lines:
        output_file.write(line)

    output_file.write("\nWord count:\n")
    for word, count in word_counts.items():
        output_file.write(f"{word}: {count}\n")
```

```
Input:
This is kartik Neural Network course Machine learning course
Word count:
This: 1
is: 1
kartik: 1
Neural: 1
Network: 1
course: 2
Machine: 1
learning: 1
```

Question 3 Output:

In [8]:
```
def inches_to_cm(inches):
    return inches * 2.54
heights_in_inches = []
n = int(input("Enter the number of customers: "))
for i in range(n):
    height = float(input(f"Enter height of customer {i+1} in inches: "))
    heights_in_inches.append(height)
heights_in_cm = []
for height in heights_in_inches:
    heights_in_cm.append(inches_to_cm(height))
print("Heights in inches:", heights_in_inches)
print("Heights in centimeters:",heights_in_cm)
```

```
Enter the number of customers: 5
Enter height of customer 1 in inches: 4
Enter height of customer 2 in inches: 6
Enter height of customer 3 in inches: 3
Enter height of customer 4 in inches: 7
Enter height of customer 5 in inches: 8
Heights in inches: [4.0, 6.0, 3.0, 7.0, 8.0]
Heights in centimeters: [10.16, 15.24, 7.62, 17.78, 20.32]
```