**• Scenario:** A u **Ramishahope Artificial Intelligence Pvt Ltd**

**36, Old Anandas, SG Arcade, Marudhamalai Main Road, Vadavalli, Coimbatore -641041.**

**+91 6385383227 | www.hopelearning.net | mdaravind@hopelearning.net | 33AAMCR3722R1ZU**

**Ramishahope Artificial Intelligence Pvt Ltd**

**36, Old Anandas, SG Arcade, Marudhamalai Main Road, Vadavalli, Coimbatore -641041.**

**+91 6385383227 | www.hopelearning.net | mdaravind@hopelearning.net | 33AAMCR3722R1ZU**

**• Scenario:** A data analysis tool processes a list of numbers and needs to identify the most frequently occurring value.  
 Write logic to find the most frequently occurring number in a given list.

1. From a given list, we find duplicate values

2. and then print the duplicate values to display frequently recurring value

**• Scenario:** A text-processing application needs to compare words and check if they are anagrams (contain the same letters in a different order).  
 Write logic to determine whether two given strings are anagrams.

1. Get input of first string from user

2. Get second string input from user

3. Remove the spaces for Both the str

4. Then we will apply sort for both the string

5.Then we apply if conditions to compare both are same or not, if yes , print it, if not, no anagram

**• Scenario:** A speech analysis program needs to count the number of vowel sounds in a given input.  
 Write logic to count the number of vowels in a given string.

1. First we will put a variable called vowels and put in a list like vowels=[‘a’,’e’,’I’,’o’,’u’]

2. Then we will compare if vowels are present in list or not using if condition, if present then we will get the count of vowels

**• Scenario:** A text-editing software includes a feature to reverse the order of words in a sentence for stylistic effects.  
 Write logic to reverse the order of words in a sentence while keeping the words themselves intact.

1. Get list from user

2. Use reverse variable from the given list and apply [::-1] to reverse

3. Finally print it

**• Scenario:** A missing number is detected in a sequence of values stored in a database.  
 Write logic to find the missing number in a list containing n-1 numbers from 1 to n.

**• Scenario:** An ATM machine processes withdrawal requests and needs to ensure that users cannot withdraw more than their account balance.  
 Write logic to allow a withdrawal only if the balance is sufficient.

1. Get user input for balance

2. Get user input for withdrawal

3. Using if condition compare if withdrawal > balance

4. Print message “insufficient funds”

5. If not, update balance = balance-withdrawal

6. Print the balance

**• Scenario:** A system needs to verify whether a given dataset contains duplicate entries.  
 Write logic to check whether a given list contains duplicate values.

1. Using list, we can find the duplicate entries

2. Then finally print it

**• Scenario:** A digital calculator includes a feature to sum the digits of a number for verification purposes.  
 Write logic to calculate the sum of all digits in a given integer.

1. Using for loop we can write like for num in range(1,5)

2. Then we can print(sum(num))

**• Scenario:** A language-learnin **Ramishahope Artificial Intelligence Pvt Ltd**

**36, Old Anandas, SG Arcade, Marudhamalai Main Road, Vadavalli, Coimbatore -641041.**

**+91 6385383227 | www.hopelearning.net | mdaravind@hopelearning.net | 33AAMCR3722R1ZU**

**Ramishahope Artificial Intelligence Pvt Ltd**

**36, Old Anandas, SG Arcade, Marudhamalai Main Road, Vadavalli, Coimbatore -641041.**

**+91 6385383227 | www.hopelearning.net | mdaravind@hopelearning.net | 33AAMCR3722R1ZU**