1. **Scenario:** A program needs to find the second largest number in a given list of numbers.

   Write logic to find the second largest number in a given list.

   Logic
   1. Get a list
   2. List converted into the set using set function
   3. Sorted by set and removed duplicates
   4. Find the second largest number is -2 of set

2. **Scenario:** A function needs to convert an integer to its binary representation without using Python's built-in `bin()` function.

   Write logic to convert a given integer to its binary representation.

   Logic
   1. Get a number
   2. Split the number
   3. Check numbers are only 0 or 1, set function, remove duplicates
   4. If number is 0 or 1 means binary number else not

3. **Scenario:** A function needs to merge two sorted lists into a single sorted list efficiently.

   Write logic to merge two sorted lists into one sorted list.

   Logic
   1. Get A list and B list
   2. List A and B have to sorted
   3. Result List=A+B will be merge list

4. **Scenario:** A function needs to find the first non-repeating character in a string for text processing.

   Write logic to find the first non-repeating character in a given string.

   Logic
   1. Get a string
   2. Split the string into the character
   3. Use the Counter lib for list to dictionary with counting of each character
   4. Non-repeating character is 1 count in first

5. **Scenario:** A program needs to identify common elements between two lists for data filtering.

   Write logic to find the common elements between two lists.

   Logic
   1. Get list 1 and list 2
   2. Using list1 & list 2 common intersection
   3. Print the common intersection

6. **Scenario:** A function is required to reverse a given number.

   Write logic to reverse a given number.

   Logic
   1. Get a number
   2. Change Number into string
   3. Use the string reverse function
   4. String to Number change and print

7. **Scenario:** A program needs to count the number of words in a given sentence.

   Write logic to count the number of words in a given sentence.

   Logic
   1. Get a sentence
   2. Split the sentence in list
   3. Find the length of list is words count

8. **Scenario:** A function needs to compute the factorial of a number using iteration instead of recursion.

   Write logic to find the factorial of a given number using iteration.

   Logic
   1. Get a number
   2. Using recursion function is n
   3. If n is 0 or 1, factorial is 1
   4. Else: Formula = n * factorial(n-1)

9. **Scenario:** A program is required to convert all strings in a list to uppercase.

   Write logic to convert all strings in a list to uppercase.

   Logic

   1. Get a string
   2. Convert the string, using split function with uppercase into new list
   3. Print the list

10. **Scenario:** A function is needed to compute the greatest common divisor (GCD) of two numbers using the Euclidean algorithm.

    Write logic to calculate the GCD of two numbers using the Euclidean algorithm.

    Logic

    1. Read two number a and b
    2. Find the GCD