

Problem 1: String Manipulation

Write a Python program that takes a user-input string and checks if it contains only alphabetical characters (no numbers or symbols). If the input is valid, print the string in uppercase; otherwise, print an error message.

Problem 2: Palindrome Checker

Create a Python function that determines if a given word is a palindrome. Allow the user to input a word, and then use your function to check and print whether the word is a palindrome or not.

Problem 3: List Operations

Write a Python program that takes a list of integers as input and calculates the sum of all prime numbers in the list. Display the result.

Problem 4: List Manipulation

Create a function that accepts two lists of integers and returns a new list containing common elements between the two input lists. Display the resulting list.

Problem 5: String Formatting

Develop a program that reads a sentence from the user and replaces all occurrences of the word "not" with "good" in the sentence. Print the modified sentence.

Problem 6: Loop and String Manipulation

Write a Python program that takes a string as input and prints each character along with its ASCII value on a new line.

Problem 7: List Comprehension

Create a Python program that generates a list of squares of even numbers from 1 to 10 using list comprehension. Display the resulting list.

Problem 8: While Loop

Implement a Python program that calculates the factorial of a user-input positive integer using a while loop. Display the result.

Problem 9: Nested Loops

Write a program that prints a multiplication table for numbers 1 to 5. Use nested loops to achieve this.

Problem 10: Advanced String Formatting

Design a program that takes a list of names and their corresponding ages. Display the information in a formatted table with columns for names and ages.