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ASSSIGNMENT NUMBER -02

FYMCA- Div-A and Div-B

Topic- Moderate Level Python Programming

Date: 25/1/2025   Submission Date: 5/02/2025

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1. Write a function is_prime(number) that checks if a number is prime. The function should return True if the number is prime, otherwise False.

2. Write a function max_element(numbers) that returns the maximum element from a given list of numbers.

3. Write a function count_vowels(s) that takes a string and returns the number of vowels (a, e, i, o, u) in the string.

4. Write a function remove_duplicates(lst) that removes duplicate values from a list and returns the list with only unique elements, preserving the original order.

5. Write a function sum_even(lst) that takes a list of numbers and returns the sum of all even numbers in the list.

Note : For implementing the above function define your own function not allowed to use inbuilt / predefined python functions or methods

Now, write a menu-driven program that lists out all the options for the user. The user can choose an option from the following:

A. Check for Prime Number
B. Find Maximum Element in a List
C. Count Vowels in a String
D. Remove Duplicates from a List

E. Sum of Even Numbers in a List
F. Exit

For each option, your program should call the corresponding function and display the result.

The final program will be a menu-driven interface where the user can choose which operation to perform. Each operation will call one of the above functions, and the program should keep running until the user chooses to exit.