

# **PROGRAMMING FUNDAMENTAL**

Topic: Pointers and Arrays

Task Title:

Student Performance Analyzer – Grade Trends & Name Character Stats via Pointers

Task Overview:

Write a program using only pointer arithmetic (no [], no dynamic memory allocation) to analyze student performance data. Your code must be broken into separate functions, and at least 4 functions must use pointers passed by reference.

Your Program Must:

1. Find the Longest Decreasing Subsequence in the student's grade entries.

A strictly decreasing sequence means each number is less than the one before it.

2. Count Unique Consonants in the student's name (case-insensitive, each consonant counted once).

3. Check if the Sum of First and Last Grades is Even.

4. Display All Results in a summary function.

Input Example:

Enter number of grades: 8

Enter grades: 91 85 82 88 84 81 70 60

Enter name: Areeba Khan

Expected Output:

Longest decreasing sequence: 91 85 82

Length: 3

Unique consonants: 6

Sum of first and last grades is even