



Republic of the Philippines
North Eastern Mindanao State University

Final Requirement Instructions: **Fundamentals of Programming (C++)**

Title: Compilation of Semester Projects

Objective:

The goal is to integrate all the codes and projects created during the semester into a single, cohesive program. This program will serve as evidence of your understanding and application of C++ programming concepts learned in this course.

Requirements:

1. Menu Integration:
 - Combine all the activities and projects from Prelim to Final into a single program.
 - Implement a menu-driven application using a switch-case structure. The menu should allow users to select which functionality to execute.
2. Program Features: Include the following features in your program:
 - Option 1: Print Hello World
 - Option 2: Personal Information (Input data)
 - Option 3: Calculator (Input data)
 - Option 4: Even and Odd Checker (Conditional) (Input data)
 - Option 5: Print Numbers Horizontally (For Loop - Static data)
 - Option 6: Multiplication Table (For Loop - Static data)
 - Option 7: Sum of 1 to 10 Positive Integers (For Loop - Static data)
 - Option 8: Calculate the Length of a 1D Array (Static data)
 - Option 9: Print All Elements of a 1D Array (Static data)
 - Option 10: Search in a 1D String Array (Static data)
 - Option 11: Print String Elements in a 2D Array (Static data)
 - Option 12: Find the Maximum Value in a 2D Array (Static data)
 - Option 13: Combine 1D and 2D Array Outputs (Static data)
 - Option 0: Exit
3. Program Structure:
 - Organize your code into functions for each menu option.
 - Ensure proper flow and error handling (e.g., invalid inputs).
4. Error Handling:
 - Validate user inputs for numeric and string data where applicable.
 - Add meaningful prompts to guide users and handle invalid choices gracefully.
5. Documentation:
 - Add comments to describe each part of the program.
 - Include a header comment with your name, section, and the program's purpose.



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Submission Guidelines: Submit the source code file (**FullName_FinalProject.cpp**)

Grading Criteria:

Criteria	Points
Functionality	40
Error Handling	20
Code Organization	15
Documentation	15
Presentation	10
Total	100

Important Reminders:

- **Start Early:** Avoid last-minute work. Plan and allocate time to complete and test your program.
- **Backup Your Work:** Keep a copy of your project to prevent data loss.

Good luck, and showcase your programming skills!