**Co-Teaching Assignment**

Imagine that you are an instructor, and your objective is to explain to students how to solve a problem.

Each group will present their own task.

Group 1. **The Wheat and Chessboard Problem.**

No input in this program.

Group 2. **Calculating the Factorial of a Number**

Textbook. Chapter 4. Programming Exercises. #11.

Group 3. **Tuition Increase**.

Textbook. Chapter 4. Programming Exercises. #10.

The tuition for this program should be entered by the user.

Group 4. **Ocean Levels**.

Textbook. Chapter 4. Programming Exercises. #9.

The number of measurement’s years should be entered by the user.

The main goal of preparation for the lesson is that each group independently developed a plan in accordance with the Program Development Cycle.

***Programs must be carefully designed before they are written. During the design process, programmers use tools such as pseudocode and flowchart to create models of programs.***

1. Represent your task and explain the essence.
2. Determine the steps that must be taken to perform this task. You might break down that task into a series of steps and develop an algorithm.
3. Write a program in pseudocode. Pay attention to every section.
4. Draw a flowchart.
5. **Pay particular attention to the output of data that should be presented in tabular form.**

You don’t need to write the whole program in this case. Your role in this experiment is to formulate the problem, determine the input and output data, and to provide solutions in the form of the algorithm.

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| **Group 1** | **Group 2** | **Group 3** | **Group 4** |
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