CALCULATOR DESIGN ACTIVITY (5 PTS)

Full Names of Team Members: _____

Activity Description

Create a UML class diagram design for your Calculator application. The program description is given below.

Write a calculator program that supports undo and logging. Here are the program requirements:

1. Must support at least +, -, *, /.

2. Commands that have been executed can be undone, with unlimited levels of undo.

3. The log maintains a list of commands that have been executed.

4. Must use the **Command design pattern** to support undo-ing and logging of operations.

5. Must be able to write the log to a file in the following formats: plain text or XML (you choose the element names).

6. Must use the **Strategy design pattern** to encapsulate each log-file-saving algorithm in separate classes that implement a common interface.