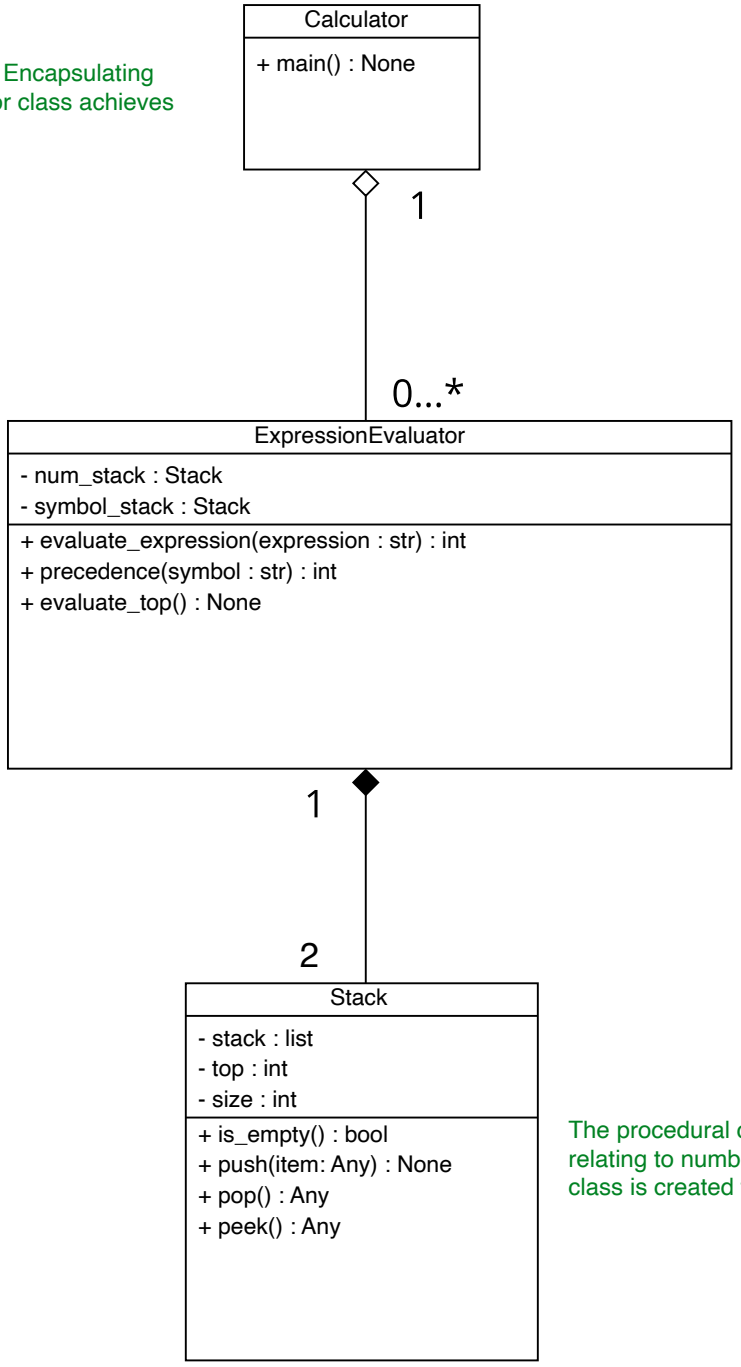
Calculator

This class serves as the entry point for the program. Encapsulating the calculator functionality into a dedicated Calculator class achieves modularity and separation of concerns.



ExpressionEvaluator

In the procedural code, the evaluation logic is spread across multiple functions and conditional statements. In this OOP design, this logic is consolidated within the ExpressionEvaluator class. This class encapsulates the logic for parsing and evaluating expressions, using instances of the Stack class for managing numbers and symbols. The evaluate_expression method performs the main evaluation process, while precedence and evaluate_top help in symbol evaluation.

Stack

The procedural code uses separate functions for stack operations relating to numbers and symbols. In this OOP design, a generic Stack class is created to handle these operations in a unified manner.