

Report on Parsing CSV file and evaluating postfix expressions:

1. Created IOUtils.java to read input and write CSV files.
- 2.(a) Implemented Node.java class which has private fields for the contents of the node (string representation of the value or reference to another cell), and its type(determined by pattern matching against regular expressions defined in an enumeration of possible node types).

(b) Written various methods to retrieve information from the node such as type, content, and referenced cell key, to perform calculations on nodes of type "OPERATION" which involves parsing the contents of the node and performing arithmetic operations based on the operator. This class throws an "InvalidNodeException" if the node does not match a valid format or if an operation is attempted on a node that is not type of operation.
3. Using Spreadsheet.java class, implemented logic for each possible case which is defined in Node.java. The method "processSpreadsheet" iterates over each node and process accordingly.
4. MatrixRPNCalculator.java is the main class which is the entry point of the program, reads input CSV files using IOUtils class, perform operations on it using Reverse Polish Notation by calling 'processSpreadsheet' method and outputs the resulting matrix in CSV format.
5. InvalidNodeException.java is a custom exception class, used in other classes to handle exceptions that might occur when processing a CSV file.
6. Run the code with various test input CSV files to see how it works in different scenarios.
7. Created a GitHub Repository and pushed the code into it.