Q. 1. Use a stack to transform the following infix expression into postfix form. Show clearly the output stream, stack, and the most recently read character. Then use a stack to evaluate the resultant postfix expression. Show the stack snapshot whenever it changes.

\[ 2 + 5 \times 2 + (2 \times 2 + (3 + 2) \times 2) \times 4 \]