Date: 29/09/2025

Experiment 4.1

AIM

To implement intermediate code generation

ALGORITHM

1. Start
2. Read arithmetic expression as a string
3. For each operator in order of precedence (‘/’>’*’>’+’>’-’):
    1. Parse input from left to right
    2. If the ith character is an operator:
        1. The (i-1)th character and the (i+1)th character are considered operands.
        2. A new temporary variable is initialized and considered the destination.
        3. Three address code based on operator, operands, and the destination is represented as quadruple and printed.
        4. The ith character and the two characters surrounding it are replaced with the temporary variable.
4. Handle assignment by representing it as as quadruple where the LHS is the operand and the RHS is the destination. The operator is ‘=’.
5. Stop

RESULT

Successfully implemented intermediate code generation