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Data Structure
Tutorial-4

1. Write an algorithm to convert Infix to postfix and Infix to prefix conversation using stack.
2. Convert following Infix expressions into postfix and prefix expression using stack. (Mention each intermediate steps)
 - a. $A+B*C+D$
 - b. $(A + B) * (C + D)$
 - c. $A*B+(C/D) / E-F$
 - d. $X^Y/(5*Z) + 2$
 - e. $A+ (B*C-(D/E^F)*G)*H$
 - f. $K + L - M*N + (O^P) * W/U/V * T + Q$
 - g. $(A + B * (C - D)) / E$
3. What is the result of evaluating the following expression? (Infix to Postfix and Infix to prefix)
 - a. $10 + 3 * 5 / (16 - 4)$
 - b. $(5+3) * (8-2)$