CS 271 Computer Architecture and Assembly Language

Self-Check for Lecture#16

Solutions are posted

1. Convert the following infix expressions to RPN:

    ```
    a. (a + b) − (c + d) * e
    ```

    ```
    b. a + b * c − d * e / f + h
    ```

2. Convert the following postfix expressions to infix:

    ```
    a. abc+d*+
    ```

    ```
    b. ab+cd/e*f/+g−h*
    ```

3. Let $a = 5$, $b = 7$, $c = 4$, $d = 2$, $e = 3$, $f = 1$, $g = 6$. Evaluate the following RPN expressions:

    ```
    a. ab+c−d*
    ```

    ```
    b. ab+c+de*f/g−*
    ```

4. Implement the statement `G = (A + B x C) / (D − E x F)` in the IA-32 floating-point unit. It's not necessary to write a complete program or procedure ... just write an FPU code fragment.