

# IT Workshop -II (CS251)

## Lab Assignment : 7

Q-1) You have a text file named "poem.txt". Do the following sequence of steps:

- I. Write a thread class, which should count the number of words present in the text file and display the result.
- II. Write a thread class, which should count the number of vowels present in the text file and display the result.
- III. Write the main method in another java class, where you should create objects of the above written two thread classes and start their execution.

Q-2) Write a Java program, which accepts an arithmetic expression containing numbers, "+" and "-" as input. Evaluate and print the result of the expression.

**Note:** The expression does not contain any white spaces.

**Some useful methods:**

- `str.replaceAll("[^0-9,]", " ")` : it returns a string, where all non-numeric characters have been replaced with white spaces.
- `Character.isDigit(ch)` : returns true if *ch* is a digit or else false

**Example:** Input: 1+2+6-2+18-1 Output: 24

### Home Task

Q-3) Write a Java program, which accepts an postfix expression containing numbers, "+", "-", "\*" and "/" as input. Evaluate the expression.

**Note:** There are white spaces in between every operator and operand.

**Example:**

Input: 1 2 +                      Output: 3

Input: 1 2 3 \* + 4 +            Output: 11

Input: 8 5 \* 7 4 2 + \* +        Output: 82