Course: DSA

*Homework 02*

**Stack - Queue**

Given the StackQueue source code folder, students conduct the following tasks.

Students can use LinkedList<>, Stack<>, and Queue<> in Java API for this homework.

# Task 1:

Add to **StackEx** classthe following method to evaluate postfix arithmetic expressions

**public int evaluate(String exp)**

* Args:
  + exp: a space-separated arithmetic expression in postfix format, i.e.,

2 3 + 4 \* 8 9 + -

* Return:
  + an integer

Note: students should refer to the given algorithm in the lecture presentation.

| *Copy and paste source code of the method here* |
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# Task 2:

Add to **QueueEx** class the following method to extract lower-case letters of a string and then concatenate them in the same order.

**public String extractLow(String s)**

* Args:
  + s: a string whose letters are alphabetic
* Return:
  + a string

For example:

* input: “AcBddeF”
* output: “cdde”

| *Copy and paste source code of the method here* |
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# Submission Notice:

* Export your answer file as pdf
* Rename the pdf following the format:

hw02\_<student number>\_<Full Name>.pdf

E.g: **hw02\_123456\_NguyenThanhAn.pdf**

*If you have not been assigned a student number yet, then use 123456 instead.*

* Careless mistakes in filename, format, question order, etc. are not accepted (0 pts).