

## Lab 06 Stack

You **MUST NOT** modify any existing codes in all given templates unless the instruction allows you to do so.

You are given an interface Stack.

1. (6 marks) Class ArrayListStack is supposed to be an implementation of a stack using Java's ArrayList. Complete class ArrayListStack from a given template:
  - Implement a default constructor and all methods from interface Stack.
  - Additional methods may be required in order to run tests.
  - Use Class ArrayListStackTest for testing your ArrayListStack.
  
2. (6 marks) Class UseStack is given. Write code for method *sort(Stack s)*. This method receives a stack as its parameter, then **sort** the stack so that the smallest value is on top and the largest value is on the bottom:
  - You are allowed to use additional stacks to help, but you are not allowed to create other data structures such as arrays or lists.
  - You are allowed to create primitive variables.
  - Operations on stacks must only be operations defined in interface Stack.
  - Use class UseStackTest to test your code.