

Lab 1

Submit your java file on MS Teams, make sure you write your ID and name in the file

Task1) [100 marks] Provide an ADT java class for one-dimension arrays named “MyArray” that supports the following functionalities:

- 1) **[10 marks]** Array construction.
- 2) **[15 marks]** Populate data. // suggest a way to fill in arrays elements, returns 1 when success, 0 otherwise
- 3) **[10 marks]** Array Display.
- 4) **[20 marks]** Insert at specific position. // returns 1 when success, 0 otherwise
- 5) **[15 marks]** Delete Value. // physical delete, returns 1 when success, 0 otherwise
- 6) **[10 marks]** Search for a value.
- 7) **[10 marks]** Find Maximum.
- 8) **[10 marks]** Find Minimum

Hints.

- Create the proper data members, methods signatures, and proper class interface.
- Use the clean code rules indicated in class. Use refactoring and follow OODP.
- Create the proper test cases that show that your code is working correctly for every method
- Use comments in your code