LAB 04: POINTER (cont.)

1 IN-CLASS

Complete the following functions using POINTER notations:

1. Generate a 2-D array (matrix) of n rows and m columns dynamically, where n and m are specified by user.
   - `int** generateMatrix(int n, int m)`
2. Create a matrix that is the transposition of a given $n \times m$ matrix
   - `int** tranposeMatrix(int** a, int n, int m)`
3. Create a matrix that is the sum of two given matrices of both size $n \times m$
   - `int** sumMatrices(int** a, int** b, int n, int m)`
4. Create a matrix from a given $n \times m$ matrix such that rows are rearranged in ascending order of sums of elements in each row.
   - `int** rowAscendingMatrix(int** a, int n, int m)`
5. Create a matrix that is the result of removing the i^{th} column from a given $n \times m$ matrix ($0 <= i < m$):
   - `int** removeColumn(int** a, int i, int n, int m)`

2 HOMEWORK

3 PREPARING YOUR SUBMISSION

Create a new folder and name it with your **Student ID**, e.g. 19127001. This folder includes

- **Code**: a sub-folder that contains your source code (*.cpp, *.h, etc.). Do not forget to delete all intermediate files.
- **Report** (if required): a sub-folder that contains your written report (*.pdf).