

# Lecture 20 & 21: Classes – Part

## III

Class page: <https://github.com/tsung-wei-huang/cs1410-40>

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# Exercise 1: Matrix Class

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- ☐ **Write a matrix class that supports these methods:**
  - ☐ 1 - get the number of rows
  - ☐ 2 - get the number of columns
  - ☐ 3 - set/get the element of the matrix at a given position (i, j)
  - ☐ 4 - adding two matrices and return the result
  - ☐ 5 - multiplying the two matrices and return the result
- ☐ **Copy constructor**
- ☐ **Move constructor**

# Exercise 2: Matrix Class Template

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- ❑ Enable the matrix class to support arbitrary data types without hard-coded data type
  - ❑ int, float, double, short int, etc...