## CPS321 - 2025 Spring - Midterm#1

# DUE DATE: Feb. 28th (Fri.) no later than 11:59 PM EST via email or GitHub

#### REQUIREMENTS

- Individual work.
- Print name is required.
- The submission file should be titles: CPS321\_2025\_Spring\_Midterm#1\_[PRINT NAME].zip/others.
- All submissions will be sent to Fanchao (fmeng@misericordia.edu) via email or GitHub. Fanchao will confirm each submission.
- Late submissions are NOT accepted unless you have the permission from Fanchao.

### Problems (100 points in total)

As discussed in class, before the OS kernel is started, the programs provided by BIOS are loaded in the memory and running. Interrupt routines are a part of the programs.

#### Questions:

- Are those interrupt routines provided by BIOS staying in the memory and used by the OS after the OS starts, or not?
- If you believe not, please use Linux 0.11/0.12 as an example to explain how interrupt routines are configured after the OS starts. Your explanation is required to be specific as much as possible using concrete code as justification.