## Computer System Architecture, Spring 2022
## Project description
## Deadline: 2 Jun 2022, 11:59 am

In this project, you are required to implement a MIPS processor simulator using python (MyHdl library). You are required to implement a processor that can support the following instructions:

- ADD
- SUB
- ADDI
- SUBI
- XOR

- LOAD
- STORE
- BEQ
- AND
- OR

## Tools needed:

- You can use any of the following software:
  - Jupyter Notebook (download anaconda)
  - Pycharm
  - Spyder

- You'll need to download the following libraries in any of the previous software mentioned:
  - MyHdl - "pip install myhdl"
  - MyHdlPeek – "pip install myhdlpeek"

## Submission Guidelines:

- You're allowed to work in teams 2-3 (cross-tutorials are allowed)
- Any case of plagiarism or cheating will get zero
- You will have to submit the project to the classroom before the deadline
- You'll need to submit:
  - A working code
  - A screenshot of the resulting wave form showing the instruction execution results
  - A documentation explaining how the system is working.

## Bonus Task:

- Bonus marks will be added to students who will implement a data forwarding unit.

## Helper Sites:

- https://github.com/devbisme/myhdlpeek
- https://anaconda.org/conda-forge/myhdl
- http://docs.myhdl.org

If you have any issue, please don't hesitate to contact me.

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