Assignment 2

- Can be done in groups of max 2 students
- Submit the code and along with snapshot of output. The file name of your code should contain your roll number
- Please comment your code sufficiently for us to understand it
- Submit whatever you think is useful and needed for evaluation
- Submit individual files and not compressed files
- Rename your codes to <roll_number>_filename
- If you are getting an error and unable to get

  the result, submit snapshot of error
- Submit by June 19 2021, 11:59pm

15 marks - Code
5 marks- for a summary/report of the result

Q1:

- Write a MIPS assembly program in the MIPS MARS simulator to read N numbers stored in consecutive memory locations.
- Sort them in ascending order and store the sorted numbers in a different set of memory locations
- Inputs to the code:
  - N numbers
  - Starting memory address X of the input numbers
  - Starting memory address Y of the output sorted numbers
- Use the mips11.asm uploaded in the below link as a template. It has been uploaded in the assignment 2 folder on LMS too
  - How to use this template, how to provide inputs and test your code is, explained in the video at this link:
  - https://iiitbac-my.sharepoint.com/:f:/g/personal/nanditha_rao_iiitb_ac_in/EnDSItTdF-dBvV6spVZr8ecBJsgGEXfUUXup9kNOfyPbnA?e=DrEoIn

How to run

- Use MARS to do the assembly
- Download from http://courses.missouristate.edu/KenVollmar/MARS/download.htm
- Run on linux using the command java -jar Mars4_5.jar
  - Write the assembly in a new asm file (File--> New) and save the file
  - Assemble the program using Run--> Assemble. Check if there are any assembly errors
  - Check the output in the memory or register window
- Alternately run: java -jar Mars4_5.jar nc mips1.asm --> Observe results in terminal or GUI