

Assignment-1:

Due Date: 01/27

Problem-1: 15 Points

General description: Create a repository in github and make it public. You have to upload two files in this repository for this problem. One will be a bash script file which is going to install software packages and another will be a yml/yaml file that is going to instantiate your python environment.

Bash Script file: Write a single bash script that at first **updates** the system and then install the following packages 1) htop 2) screen 3) miniconda.

Installing miniconda: At first start small creating the miniconda folder and then run the script then add one by one other commands. Finally check whether /path/to/miniconda/bin/conda file exist or not. If it exists then run the command /path/to/miniconda3/bin/conda init bash (This command may change when writing the script).

The installation instructions are available at

<https://docs.conda.io/projects/miniconda/en/latest/index.html> (Do not forget to click on the linux tab while on the above page)

Yml file: Once you downloaded your required packages for jupyter server and functionalities, export the environment to a file called requirements.yml. After the export, push this file in your github repo. This file will automate your python environment creation process. How to go about this is given in one of the files in Moodle. Upload this yaml/yml file to the github repo.

Problem-2: 10 Points

General description: Create a bash script that copies all the files inside of a folder to another folder. The source and destination should be given as an input by the user to the script. Name the script appropriately and push it in the same repo where you pushed the problem-1 files.

For example: ./my_copy_script.sh /users/manasdas/data1 /users/manasdas/output/results

*****END*****

The objective of doing this is that in the future the software and packages will grow. I do not want you to do things one by one every time, so this is where scripts come in, to automate the installation and configuration of the system. So learning this handy tool is going to save lots of your time and you will look professional instead of copy pasting code every time one by one.

I have seen only **once** a student copying code from another student. What did I do about it ? _____ . I want to keep this number to **one** in future too. So I request you to write your own code. You can take help/reference from the internet but do not copy from other students. This is my first and last request to all of you for this entire semester. You come to a university to learn not to collect letters (A, B, C, D).

You have to send the public github link to your repo to the TAs, send it to any one of them. Please be sure that the subject of the email that you are going to use should be "Assignment-1 CS490" (OR 590) and in the body do not forget to mention your name with your 800 number. They will grade randomly so there is no fixed TA to a corresponding student. TAs email IDs: ntavlee@siue.edu and nimorga@siue.edu

SUBMIT THE THREE FILES TO MOODLE TOO

IF YOU HAVE ANY QUESTION ASK ME AFTER THE CLASS OR DURING THE CLASS, I AM HAPPY TO EXPLAIN.