

ASSIGNMENT 2: Advance features of GIT**Dr. Varun Dutt****Due: Before 1:00 PM on August 28, 2023**

Readings:

- Class notes and slides from week 2 and 3
- Activity 2 and 3 on Moodle

Objectives:

- Understand how the advance concepts i.e., aliasing, branching, merging works in git.

Submission:

Please submit as a zipped file, the following documents:

- A MS Word/Open Office Writer document detailing your solutions to the assignment in detail. The file must contain names of all members of the group.
- Code/files of your solution with proper file names for different assignment parts

Note:

Each group will be working on their own repository, so make sure you know your group number or ask the TAs. For each group, the project source files are in a repository directory “group_N” on the online GitHub server (https://github.com/cs-308-2023/group_N) ; where, N = Group number of your group). Default username of your repository is: cs-308-2023 Password is: cs308lap

Assignment:

Step-0: Try to create aliases for a few commands like branch, commit, and checkout.

Step-1: Create a local directory named – Assignment-2 and cd into it. Now, Clone your repository from the GitHub server.

Step-2: Add a file named ‘gcd.cpp’. Write a non-recursive function that takes two integers and calculates their GCD (Greatest Common Divisor). Now, commit the changes on the Master branch. (Also, add the function in functions.h header file.)

Step-3: Now, create a branch add-rec-function to add recursive function of the GCD in the gcd.cpp. Now, make the changes to the branch: Add a recursive function that takes two integers to calculate their GCD. Commit the changes.

Step-4 Now, revert to the code on Master branch. Make some following changes in the main.cpp: Define the variable x and y and assign its value as 56 and 98 respectively. Add lines to print the output of GCD of x and y using the function defined in step 2.

Step-5: Now, merge the add-rec-function branch to the Master branch. Resolve any conflicts while merging your code by making changes in the Master branch and remove the conflict resolution markers created. You will need to stage the files that were in conflict and commit them after resolving conflicts.

Step-6: Now, add lines to print the output of GCD of x and y using recursive function in main.cpp. Also, make the required changes in functions.h file.

Step-7: Push your code to the Remote GitHub repository. Including the add-rec-function branch code.

Step-8: Finally, delete the add-rec-function branch locally and also on the remote GitHub repository.