**Git and GitHub Assignment**

ABC is a software company and you have been hired as Sr DevOps Engineer and you have to implement DevOps Lifecycle for a certain number of projects. Below tasks are assigned to you to maintain the distributed version control for a project called CAPSTONE and help developers to commit their code in local and remote repository (Git Hub)

1. Create a central repository CAPSTONE to maintain the project and upload the latest version of the project to this repository. **(Hint:-use GitHub)**
2. Sohan and Ram are 2 developers who are going to work on this project so you as a DevOps engineer help them to create 2 branches for Sohan\_branch and Ram\_branch so that they can work independently. (Write the steps to create branches in local and remote repository)

**(Hint: -use branches concept)**

1. End of each day at 5PM you must merge the code of each branch to master branch and update the central repository (write the steps to perform this task).**(Hint git push )**
2. Sohan was on leave for a week and once he returned to his work he wants to sync his branch code with master branch (what strategy you will use help Sohan).**(Hint:-git pull)**
3. Marc is a new developer joined the CAPSTONE project, so help him to create upto date project on his machine and also create a branch called Marc\_branch.(**Hint:- git branch)**
4. There is file called mathModule.txt which was modified by Marc and Sohan and ultimately the code is to be merged to master branch. What are the challenges you will face to merge the code how will you resolve this problem? (**Hint:- merge conflict)**
5. There are different versions of project are created. But operation team wants to implement version 5 how can you help them to get this version.**(Hint:-git tag)**