Assignment 3

**Task 02:**

Learn the concepts of Branching and Merging and create a document on it. Push the same document on Git as a separate file, named it as day3\_task.txt.

Basic of branching and Merging

Do some work on a website.

Create a branch for a new user story you are working on.

Do some work in that branch.

At this stage, you will receive a call that another issue is critical, and you need a hotfix. You will do the following:

Switch to your production branch.

Create a branch to add the hotfix.

After it’s tested, merge the hotfix branch, and push to production.

Switch back to your original user story and continue working.

For example

I have a calculator repository which has files like add and subtract. I am told to add a new feature called multiply in the calculator repository. I will need to clone the calculator repository into my PC.

Git clone calculator repository

Cd calculator// to go inside the calculator folder.

Git status // to see modified filed in the directory.

git branch multiply // to create a new feature

git branch // to know how many branches are there

git checkout multiply //to switch to the multiply branch

git add Multiply.cs // to create the code file in the calculator folder.

git commit -m “new file added” // to commit data into git

git diff master “new branch name” // see the difference/changes between the branches

git merge “branch name” // Merge new branch in master branch

git branch -d “branch name” // Delete branch

**TASK 03:**

What is an Elastic IP and how it is different from Dynamic IP?

Elastic IP is a static IPv4 address designed for dynamic cloud computing. Elastic IPs get allocated to your account and stay the same - it is up to you to attach them to an instance or not. You could say they are static public IP addresses.

Dynamic IP is a public IP which is your regular at home IP which changes from time to time.

What is the Client Server Model, Explain in detail?

The client can be a machine, for example PC phone tablet, etc. Client can also be a program that allows users to make requests like accessing a website www. So basically, it is accessible via the web.

The server can contain web resources, host web application, stores user and program data. It serves hundreds or thousands of clients and a server is always listening for requests and as soon as it received one, responds with a message.

The client server model is a centralized web architecture that classifies computers into two sections, requests, and response providers.