

# CA6C1 – DevOps - National Institute of Technology, Trichy

## Assignment 1 – BASH & GIT

### Question 4

- a. Create a master repository using a GIT terminal in any version control platform (github, gitlab, bitbucket, gogs, codeberg, radicle, gitea etc.) and add files of any one question (Q1, Q2, Q3) from this assignment into this repository. Capture repository status at this point.

The screenshot shows the GitHub interface for a repository named 'DevOps-Assign-Q4' by user '03Harsh-777'. The repository is public and has 0 forks, 0 stars, and 1 unwatch. The page includes a search bar, navigation tabs (Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, Settings), and a 'Set up GitHub Copilot' button. Below these are sections for 'Quick setup' and '...or create a new repository on the command line'.

**Quick setup — if you've done this kind of thing before**

Set up in Desktop or HTTPS SSH `https://github.com/03Harsh-777/DevOps-Assign-Q4.git`

Get started by [creating a new file](#) or [uploading an existing file](#). We recommend every repository include a [README](#), [LICENSE](#), and [.gitignore](#).

**...or create a new repository on the command line**

```
echo "# DevOps-Assign-Q4" >> README.md
git init
git add README.md
git commit -m "first commit"
git branch -M main
git remote add origin https://github.com/03Harsh-777/DevOps-Assign-Q4.git
git push -u origin main
```

**...or push an existing repository from the command line**

```
git remote add origin https://github.com/03Harsh-777/DevOps-Assign-Q4.git
git branch -M main
git push -u origin main
```

## Add Files and Commit Changes

```
Microsoft Windows [Version 10.0.19045.5487]
(c) Microsoft Corporation. All rights reserved.

C:\Users\LENOVO\Desktop\DevOPS\assignment1-bash-03Harsh-777\q4>git init
Initialized empty Git repository in C:/Users/LENOVO/Desktop/DevOPS/assignment1-bash-03Harsh-777/q4/.git/

C:\Users\LENOVO\Desktop\DevOPS\assignment1-bash-03Harsh-777\q4>git add .

C:\Users\LENOVO\Desktop\DevOPS\assignment1-bash-03Harsh-777\q4>git add .
warning: in the working copy of 'Karprekarcodesh', LF will be replaced by CRLF the next time Git touches it

C:\Users\LENOVO\Desktop\DevOPS\assignment1-bash-03Harsh-777\q4>git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   File Types.png
        new file:   Karprekarcodesh
        new file:   StopLight game
```

- b. Push the files of one question (Q1, Q2, Q3) from this assignment from your local machine to a repository. Capture repository status at this point.

## Add the GitHub Remote

```
C:\Users\LENOVO\Desktop\DevOPS\assignment1-bash-03Harsh-777\q4>git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   File Types.png
        new file:   Karprekarcodesh
        new file:   StopLight game

C:\Users\LENOVO\Desktop\DevOPS\assignment1-bash-03Harsh-777\q4>git add .

C:\Users\LENOVO\Desktop\DevOPS\assignment1-bash-03Harsh-777\q4>git commit -m "Initial commit"
[master (root-commit) e153b01] Initial commit
 3 files changed, 136 insertions(+)
 create mode 100644 File Types.png
 create mode 100644 Karprekarcodesh
 create mode 100644 StopLight game

C:\Users\LENOVO\Desktop\DevOPS\assignment1-bash-03Harsh-777\q4>git push origin master
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 4 threads
Compressing objects: 100% (5/5), done.
Writing objects: 100% (5/5), 24.83 KiB | 6.21 MiB/s, done.
Total 5 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/03Harsh-777/DevOps-Assign-Q4
 * [new branch]      master -> master
```

The screenshot shows a GitHub repository named "DevOps-Assign-Q4" (Public). The repository has 1 branch (master) and 0 tags. It contains three files: "File Types.png", "Karprekarcodes.sh", and "StopLight game", all from the initial commit by user 03Harsh-777. The repository has no description, website, or topics provided. It has 0 stars, 1 watcher, and 0 forks. The "About" section is empty. The "Releases" section shows no releases published. The "Packages" section shows no packages published. The "Languages" section shows that the repository is 100.0% Shell. A prominent "Add a README" button is visible in the center of the repository view.

```
C:\Users\LENOVO\Desktop\DevOPS\assignment1-bash-03Harsh-777\q4>git status
On branch master
nothing to commit, working tree clean
```

- c. Create a new branch to your existing repository and now pull your repository locally, make changes to 9 comment lines and merge into the master repository. Capture repository status at this point.

### Create and Switch to a New Branch

```
C:\Users\LENOVO\Desktop\DevOPS\assignment1-bash-03Harsh-777\q4>git checkout -b newBranch
Switched to a new branch 'newBranch'
```

This creates a new branch named newBranch and switches to it.

### Pull the Latest Changes from GitHub

```
C:\Users\LENOVO\Desktop\DevOPS\assignment1-bash-03Harsh-777\q4>git pull origin master
From https://github.com/03Harsh-777/DevOps-Assign-Q4
* branch      master      -> FETCH_HEAD
Already up to date.
```

### Make changes to StopLight game

```
71      #comment no. 1 done
72      #comment no. 2 done
73      #comment no. 3 done
74      #comment no. 4 done
75      #comment no. 5 done
76      #comment no. 6 done
77      #comment no. 7 done
78      #comment no. 8 done
79      #comment no. 9 done
```

### Add and Commit Changes

```
C:\Users\LENOVO\Desktop\DevOPS\assignment1-bash-03Harsh-777\q4>git add .

C:\Users\LENOVO\Desktop\DevOPS\assignment1-bash-03Harsh-777\q4>git commit -m "9 Comment lines are added"
[newBranch 93c6951] 9 Comment lines are added
1 file changed, 9 insertions(+)
```



## Push the New Branch to GitHub

```
C:\Users\LENOVO\Desktop\DevOPS\assignment1-bash-03Harsh-777\q4>git push -u origin newBranch
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 4 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 351 bytes | 351.00 KiB/s, done.
Total 3 (delta 2), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
remote:
remote: Create a pull request for 'newBranch' on GitHub by visiting:
remote:   https://github.com/03Harsh-777/DevOps-Assign-Q4/pull/new/newBranch
remote:
To https://github.com/03Harsh-777/DevOps-Assign-Q4
 * [new branch]      newBranch -> newBranch
branch 'newBranch' set up to track 'origin/newBranch'.
```

## Switch Back to Master

```
C:\Users\LENOVO\Desktop\DevOPS\assignment1-bash-03Harsh-777\q4>git checkout master
Switched to branch 'master'

C:\Users\LENOVO\Desktop\DevOPS\assignment1-bash-03Harsh-777\q4>git pull origin master
From https://github.com/03Harsh-777/DevOps-Assign-Q4
 * branch            master      -> FETCH_HEAD
Already up to date.

C:\Users\LENOVO\Desktop\DevOPS\assignment1-bash-03Harsh-777\q4>
```

## Merge the Feature Branch into Master

```
C:\Users\LENOVO\Desktop\DevOPS\assignment1-bash-03Harsh-777\q4>git merge newBranch
Updating e153b01..93c6951
Fast-forward
 StopLight game | 9 ++++++++
 1 file changed, 9 insertions(+)
```

### Push the Merged Changes to GitHub

```
C:\Users\LENOVO\Desktop\DevOPS\assignment1-bash-03Harsh-777\q4>git push origin master
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/03Harsh-777/DevOps-Assign-Q4
   e153b01..93c6951  master -> master
```

### Capture Repository Status

```
C:\Users\LENOVO\Desktop\DevOPS\assignment1-bash-03Harsh-777\q4>git status
On branch master
nothing to commit, working tree clean
```