



Parshvanath Charitable Trust's  
**A. P. SHAH INSTITUTE OF TECHNOLOGY**  
(Approved by AICTE New Delhi & Govt. of Maharashtra, Affiliated to University of Mumbai)  
(Religious Jain Minority)

**Department of Information Technology**

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**Class / Branch: IT**

**Subject: DevOps Lab**

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**Experiment No. 3**

**Aim: To understand and perform Version Control System / Source Code Management, install git and create a GitHub account.**

Creating a new file soham.txt and adding some content to it

```
root@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC:/home/apsit/Documents/Soham/git-demo-project2# nano soham.txt
root@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC:/home/apsit/Documents/Soham/git-demo-project2# cat soham.txt
hello this is test file
adding new line this time
root@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC:/home/apsit/Documents/Soham/git-demo-project2# git status
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   soham.txt

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        git-demo-project2/

no changes added to commit (use "git add" and/or "git commit -a")
root@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC:/home/apsit/Documents/Soham/git-demo-project2# git diff soham.txt
diff --git a/soham.txt b/soham.txt
index d237dff..2f48de9 100644
--- a/soham.txt
+++ b/soham.txt
@@ -1,2 @@
 hello this is test file
+adding new line this time
```

Adding the file back to the git

```
root@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC:/home/apsit/Documents/Soham/git-demo-project2# git add soham.txt
root@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC:/home/apsit/Documents/Soham/git-demo-project2# git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   soham.txt
```

Committing on the current git add and checking the id :

```
fatal: unrecognized argument: --online
root@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC:/home/apsit/Documents/Soham/git-demo-project2# git log --online
df195a7 (HEAD -> master, origin/master) first commit
root@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC:/home/apsit/Documents/Soham/git-demo-project2# git revert df195a7
error: your local changes would be overwritten by revert.
hint: commit your changes or stash them to proceed.
fatal: revert failed
root@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC:/home/apsit/Documents/Soham/git-demo-project2# git show commit id
fatal: ambiguous argument 'commit': unknown revision or path not in the working tree.
Use '--' to separate paths from revisions, like this:
'git <command> [<revision>...] -- [<file>...]'
root@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC:/home/apsit/Documents/Soham/git-demo-project2# git show
commit df195a714bc0327e5003356c2cdb1258f002c7d2 (HEAD -> master, origin/master)
Author: Soham01011 <crafterking@tutanota.com>
Date: Tue Aug 1 14:46:10 2023 +0530

    first commit

diff --git a/soham.txt b/soham.txt
new file mode 100644
index 00000000..d237dff
--- /dev/null
+++ b/soham.txt
@@ -0,0 +1 @@
+hello this is test file
```

Using the commit id to revert the file:

```
git <command> [<revision>...] -- [<file>...]
root@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC:/home/apsit/Documents/Soham/git-demo-project2# git log
commit df195a714bc0327e5003356c2cdb1258f002c7d2 (HEAD -> master, origin/master)
Author: Soham01011 <crafterking@tutanota.com>
Date: Tue Aug 1 14:46:10 2023 +0530

    first commit
root@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC:/home/apsit/Documents/Soham/git-demo-project2# git revert df195a714bc0327e5003356c2cdb1258f002c7d2
error: your local changes would be overwritten by revert.
hint: commit your changes or stash them to proceed.
fatal: revert failed
root@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC:/home/apsit/Documents/Soham/git-demo-project2# git reflog
df195a7 (HEAD -> master, origin/master) HEAD@{0}: commit (initial): first commit
root@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC:/home/apsit/Documents/Soham/git-demo-project2# git revert df195a7
error: your local changes would be overwritten by revert.
hint: commit your changes or stash them to proceed.
fatal: revert failed
root@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC:/home/apsit/Documents/Soham/git-demo-project2# git commit -m "second commit"
[master 26dc0e3] second commit
1 file changed, 1 insertion(+)
root@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC:/home/apsit/Documents/Soham/git-demo-project2# git log --online
26dc0e3 (HEAD -> master) second commit
df195a7 (origin/master) first commit
root@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC:/home/apsit/Documents/Soham/git-demo-project2# git revert 26dc0e3
[master 76594aa] Revert "second commit"
1 file changed, 1 deletion(-)
root@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC:/home/apsit/Documents/Soham/git-demo-project2# cat soham.txt
hello this is test file
root@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC:/home/apsit/Documents/Soham/git-demo-project2# logout
bash: logout: not login shell: use 'exit'
root@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC:/home/apsit/Documents/Soham/git-demo-project2#
```

## Conclusion:

In this experiment we have understood how to create a Git repository and how to use version control to collaborate and manage application source code.