WILEY

# Version Control using Git

## Assignment 1

### Step 1 (Install git client and configure on your local machine)

A. Git installation:

- Windows – https://git-scm.com/download/win
- MacOS – https://git-scm.com/download/mac
- Linux – https://git-scm.com/download/linux

B. Git configuration:

Use git config command for *username* and *email* to setup "Author" on your local machine.

### Step 2 (Initialize a local git repository)

1. Initialise a new local git repository and create three text files.
2. Commit the changes along with suitable commit message.
3. Check the status before and after committing the changes. Check commit history and full logs.

### Step 3 (Clone a git repository from GitHub)

1. Create a repository in GitHub account
2. Add some sample files and commit the changes
3. Clone the repository to your local laptop and verify the files
4. Add some files locally on your laptop
5. Commit changes locally.
6. Push changes to GitHub
7. Verify the changes on GitHub

## Step 4 (Clone and work with a git repository from another node)

1. Install and configure git on 2 nodes with 2 different author details.
2. Initialize a new git repository on node1.
3. Create a few sample files, edit to make some small changes and then commit the changes to create a small commit history.
4. Go to node 2 and use git clone command to clone repository created in node 1.
5. Add a new file in the repo in node 2, commit changes and push changes to node1.
6. Go back to node1 and verify if you can view the changes on node2.

## Step 5 (Working with Git Branches)

1. Create a new branch on your local repository, name it to “cool-feature”.
2. Checkout to “cool-feature”
3. Use a single step via a git command to perform the following:
    1. Create another new branch called “hot-feature”
    2. Checkout the newly created branch.