**Lab Exercise 1– Basic Git Commands on a Local Repository**

**Objective**

To understand and practice fundamental Git commands for managing version control in a local repository.

**Prerequisites**

* Git installed on your system (git --version to verify).
* Basic knowledge of terminal/command prompt.

**Steps**

**1. Configure Git (one-time setup)**

git config --global user.name "Your Name"

git config --global user.email "your.email@example.com"

git config --list

This sets your identity for commits.

**2. Create a New Local Repository**

mkdir git-lab

cd git-lab

git init

Initializes an empty Git repository inside the git-lab folder.

**3. Create Your First File and Track It**

echo "Hello Git" > file1.txt

git status

git add file1.txt

git commit -m "Initial commit: Added file1.txt"

You created, staged, and committed your first file.

**4. Make Changes and Commit**

echo "This is the second line" >> file1.txt

git status

git add file1.txt

git commit -m "Updated file1.txt with a second line"

Shows how to modify and track changes.

**5. Create and Work with Multiple Files**

echo "Another file" > file2.txt

git add .

git commit -m "Added file2.txt"

git add . stages all changes.

**6. View History**

git log

git log --oneline

Displays commit history.