Undoing Changes and Reverting Commits - Task 3

➢ Undo changes after modifying a tracked file

- Creating a new file:

```
C:\k\Presidio\Git\Task3>echo "This is line 1">newfile.txt
```

```
C:\k\Presidio\Git\Task3>git add newfile.txt

C:\k\Presidio\Git\Task3>git commit -m "Initial commit"
[master (root-commit) 2dd54d3] Initial commit
 1 file changed, 1 insertion(+)
 create mode 100644 newfile.txt

C:\k\Presidio\Git\Task3>git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        Task3.docx
        sample1.txt
        ~$Task3.docx
```

- Making changes to the file:

```
C:\k\Presidio\Git\Task3>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:   newfile.txt

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        Task3.docx
        sample1.txt
        ~$Task3.docx
```

- Undo changes in the tracked file using “git restore”:

```
C:\k\Presidio\Git\Task3>git restore newfile.txt

C:\k\Presidio\Git\Task3>git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        Task3.docx
        sample1.txt
        ~$Task3.docx
```

➢ **Undoing a commit**

- Adding a file, and committing it:

```
C:\k\Presidio\Git\Task3>git log --oneline
bea6486 (HEAD -> master) A commit that will be undone
```

- Reverting the commit using “git revert”:

```
Revert "A commit that will be undone"

This reverts commit bea6486fe3f903309793a528e55cb650abe904d5.

# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
#
# On branch master
# Changes to be committed:
#       deleted:    sample2.txt
#
# Untracked files:
#       Task3.docx
#       sample1.txt
#       ~$Task3.docx
#       ~WRL0534.tmp
#
```

➢ **DIFFERENCES**

<u>git restore:</u>

- Used to discard uncommitted changes/local modifications in the working directory.
- Does not create a new commit.
- Only affects uncommitted changes, reverting the file back to its last committed state.

<u>git revert:</u>

- Used to undo a committed change by creating a new commit that reverses the effects of a previous commit.
- Does not modify commit history.