

## Code changes-

The screenshot shows the Eclipse IDE interface. On the left, the Package Explorer view displays a project named "GitHubPractice" with a "src" folder containing "Pages" (with files HomePage.java, LoginPage.java, SearchPage.java) and "Tests" (with LoginPageTest.java). On the right, two code editors are open: "SearchPage.java" and "LoginPage.java". The "SearchPage.java" editor shows the following code:

```

1 package Pages;
2
3 public class SearchPage {
4
5     public void search() {
6         System.out.println("search page -- page class");
7         System.out.println("search page -- page class - BYEEE!");
8     }
9
10 }
11
12
13

```

The "LoginPage.java" editor shows the following code:

```

1 package Pages;
2
3 public class LoginPage {
4
5     public static void main(String a[]) {
6         System.out.println("hello login page");
7         String userName="Admin";
8         String password="Adming123";
9         System.out.println("logged in ..... ");
10        System.out.println("logged out| ..... ");
11    }
12
13

```

This screenshot is identical to the one above, showing the Eclipse IDE interface with the same project structure and code editors for "SearchPage.java" and "LoginPage.java". The code snippets are identical to those shown in the first screenshot.

```

karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ 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:   src/Pages/LoginPage.java
      modified:   src/Pages/SearchPage.java

no changes added to commit (use "git add" and/or "git commit -a")

karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ |

```

```

karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git add src/Pages/LoginPage.java

karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git add src/Pages/SearchPage.java

karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ |

```

```
karan@LAPTOP-H56OVJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git commit -m "modified page classes"
[master 87e6219] modified page classes
 2 files changed, 2 insertions(+)

karan@LAPTOP-H56OVJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git push origin master
Enumerating objects: 11, done.
Counting objects: 100% (11/11), done.
Delta compression using up to 12 threads
Compressing objects: 100% (6/6), done.
Writing objects: 100% (6/6), 577 bytes | 577.00 KiB/s, done.
Total 6 (delta 2), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
To https://github.com/karanAtreya1986/GitHubCourse.git
  97efad9..87e6219  master -> master

karan@LAPTOP-H56OVJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ |
```

Refresh github and new code has come-

The screenshot shows the GitHub interface for the repository 'GitHubCourse'. The 'Code' tab is selected. In the 'Commits' section, there are three commits listed:

- modified page classes** (by karanAtreya1986) - Commit ID 87e6219, made 1 minute ago.
- added/updated/deleted files** (by karanAtreya1986) - Commit ID 97efad9, made 49 minutes ago.
- first commit** (by karanAtreya1986) - Commit ID 9fe238f, made yesterday.

A red box highlights the first commit's details, and a yellow arrow points to the '3 commits' badge at the bottom right of the commit list.

Entire detail and the history of commit is seen-

```
karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git log
commit 87e62193ba80dafc9b3ac16d22b594890c8ef550 (HEAD -> master, origin/master)
Author: karanAtreya1986 <karan1988@gmail.com>
Date:   Thu Jul 27 08:36:27 2023 +0200

    modified page classes

commit 97efad94c67a9ed491288acf83bb03397510804b
Author: karanAtreya1986 <karan1988@gmail.com>
Date:   Thu Jul 27 07:47:24 2023 +0200

    added/updated/deleted files

commit 9fe238f14fb40197a0866d6c7661c1d9c399e9b0
Author: karanAtreya1986 <karan1988@gmail.com>
Date:   Tue Jul 25 22:02:16 2023 +0200

    first commit

karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ |
```

Commit id, reason, author, date time, branch pointed to.

Shows last two commits-

```
karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git log -2
commit 87e62193ba80dafc9b3ac16d22b594890c8ef550 (HEAD -> master, origin/master)
Author: karanAtreya1986 <karan1988@gmail.com>
Date:   Thu Jul 27 08:36:27 2023 +0200

    modified page classes

commit 97efad94c67a9ed491288acf83bb03397510804b
Author: karanAtreya1986 <karan1988@gmail.com>
Date:   Thu Jul 27 07:47:24 2023 +0200

    added/updated/deleted files

karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ |
```

If you want 4 just change 2 to 4.

## Search commits by author-

```
karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git log --author="karan"
commit 87e62193ba80dafc9b3ac16d22b594890c8ef550 (HEAD -> master, origin/master)
Author: karanAtreya1986 <karan1988@gmail.com>
Date:   Thu Jul 27 08:36:27 2023 +0200

    modified page classes

commit 97efad94c67a9ed491288acf83bb03397510804b
Author: karanAtreya1986 <karan1988@gmail.com>
Date:   Thu Jul 27 07:47:24 2023 +0200

    added/updated/deleted files

commit 9fe238f14fb40197a0866d6c7661c1d9c399e9b0
Author: karanAtreya1986 <karan1988@gmail.com>
Date:   Tue Jul 25 22:02:16 2023 +0200

    first commit

karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ |
```

No space between “author, = and value” else we get error as –

```
karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git log --author = "karan"
fatal: ambiguous argument 'karan': unknown revision or path not in the working tree.
Use '--' to separate paths from revisions, like this:
'git <command> [<revision>...] -- [<file>...]'
```

```
karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git log --author="karan"
```

## See commits before a date –

```
karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git log --before="27-07-2023"
commit 87e62193ba80dafc9b3ac16d22b594890c8ef550 (HEAD -> master, origin/master)
Author: karanAtreya1986 <karan1988@gmail.com>
Date:   Thu Jul 27 08:36:27 2023 +0200

    modified page classes

commit 97efad94c67a9ed491288acf83bb03397510804b
Author: karanAtreya1986 <karan1988@gmail.com>
Date:   Thu Jul 27 07:47:24 2023 +0200

    added/updated/deleted files

commit 9fe238f14fb40197a0866d6c7661c1d9c399e9b0
Author: karanAtreya1986 <karan1988@gmail.com>
Date:   Tue Jul 25 22:02:16 2023 +0200

    first commit

karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$
```

More examples of before:

```
karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git log --before="25-07-2023"

karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git log --before="26-07-2023"
commit 9fe238f14fb40197a0866d6c7661c1d9c399e9b0
Author: karanAtreya1986 <karan1988@gmail.com>
Date:   Tue Jul 25 22:02:16 2023 +0200

    first commit

karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ |
```

We can write strings also-

```
karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git log --after="one week ago"
commit 87e62193ba80dafc9b3ac16d22b594890c8ef550 (HEAD -> master, origin/master)
Author: karanAtreya1986 <karan1988@gmail.com>
Date:   Thu Jul 27 08:36:27 2023 +0200

    modified page classes

commit 97efad94c67a9ed491288acf83bb03397510804b
Author: karanAtreya1986 <karan1988@gmail.com>
Date:   Thu Jul 27 07:47:24 2023 +0200

    added/updated/deleted files

commit 9fe238f14fb40197a0866d6c7661c1d9c399e9b0
Author: karanAtreya1986 <karan1988@gmail.com>
Date:   Tue Jul 25 22:02:16 2023 +0200

    first commit

karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ |
```

We can search with commit reason also-

```
karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git log --grep="files"
commit 97efad94c67a9ed491288acf83bb03397510804b
Author: karanAtreya1986 <karan1988@gmail.com>
Date:   Thu Jul 27 07:47:24 2023 +0200

    added/updated/deleted files

karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ |
```

Commits in shorter version-

```
karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git log --oneline
87e6219 (HEAD -> master, origin/master) modified page classes
97efad9 added/updated/deleted files
9fe238f first commit

karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ |
```

To see range of commits between commits-

```
karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git log 97efad9 .. 9fe238f
fatal: 9fe238f: no such path in the working tree.
Use 'git <command> -- <path>...' to specify paths that do not exist locally.

karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ |
```

We cannot have space in git.

We have to write the lower first and then the higher. When we give from higher to lower then nothing is returned.

Not useful command.

It will exclude the lower commit number and then show from the succeeding one to the last one we have mentioned. In the below example, “9f...” is ignored but after that everything will be included, which includes the last one “9f.....”.

```
karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git log --oneline
87e6219 (HEAD -> master, origin/master) modified page classes
97efad9 added/updated/deleted files
9fe238f first commit

karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git log 97efad9 .. 9fe238f
fatal: 9fe238f: no such path in the working tree.
Use 'git <command> -- <path>...' to specify paths that do not exist locally.

karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git log 97efad9..9fe238f

karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git log 9fe238f..97efad9
commit 97efad94c67a9ed491288acf83bb03397510804b
Author: karanAtreya1986 <karan1988@gmail.com>
Date:   Thu Jul 27 07:47:24 2023 +0200

    added/updated/deleted files

karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ |
```

How to check number of commits for specific file-

Only mentioning file name not enough.

```
karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git log SearchPage.java
fatal: ambiguous argument 'SearchPage.java': unknown revision or path not in the working tree.
Use '--' to separate paths from revisions, like this:
'git <command> [<revision>...] -- [<file>...]'

karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ |
```

We have to give full path.

```
karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git log src/Pages/SearchPage.java
commit 87e62193ba80dafc9b3ac16d22b594890c8ef550 (HEAD -> master, origin/master)
Author: karanAtreya1986 <karan1988@gmail.com>
Date: Thu Jul 27 08:36:27 2023 +0200

    modified page classes

commit 97efad94c67a9ed491288acf83bb03397510804b
Author: karanAtreya1986 <karan1988@gmail.com>
Date: Thu Jul 27 07:47:24 2023 +0200

    added/updated/deleted files

karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ |
```

All commits done on this file mentioned here.

## Statistics-

```
karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git log --stat
commit 87e62193ba80dafc9b3ac16d22b594890c8ef550 (HEAD -> master, origin/master)
Author: karanAtreya1986 <karan1988@gmail.com>
Date: Thu Jul 27 08:36:27 2023 +0200

    modified page classes

src/Pages/LoginPage.java | 1 +
src/Pages/SearchPage.java | 1 +
2 files changed, 2 insertions(+)

commit 97efad94c67a9ed491288acf83bb03397510804b
Author: karanAtreya1986 <karan1988@gmail.com>
Date: Thu Jul 27 07:47:24 2023 +0200

    added/updated/deleted files

src/Pages/LoginPage.java | 3 ++
src/Pages/SearchPage.java | 9 ++++++
src/Tests/HomePageTest.java | 9 -----
3 files changed, 12 insertions(+), 9 deletions(-)

commit 9fe238f14fb40197a0866d6c7661c1d9c399e9b0
Author: karanAtreya1986 <karan1988@gmail.com>
Date: Tue Jul 25 22:02:16 2023 +0200

    first commit

.gitignore | 63 ++++++++++++++++++++++++++++++++
src/Pages/HomePage.java | 7 +++++
src/Pages/LoginPage.java | 8 ++++++
src/Tests/HomePageTest.java | 9 ++++++
src/Tests/LoginPageTest.java | 9 ++++++
5 files changed, 96 insertions(+)

karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$
```

“+” means number of lines added. “-“ Means number of lines deleted.

It shows commit wise how many additions and deletions.

## Patch-

```
karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git log --patch
commit 87e62193ba80dafc9b3ac16d22b594890c8ef550 (HEAD -> master, origin/master)
Author: karanAtreya1986 <karan1988@gmail.com>
Date: Thu Jul 27 08:36:27 2023 +0200

modified page classes

diff --git a/src/Pages/LoginPage.java b/src/Pages/LoginPage.java
index 0445a2b..6a2ce48 100644
--- a/src/Pages/LoginPage.java
+++ b/src/Pages/LoginPage.java
@@ -7,5 +7,6 @@ public class LoginPage {
        String userName="Admin";
        String password="Adming123";
        System.out.println("logged in .....");
+       System.out.println("logged out .....");
    }
}
diff --git a/src/Pages/SearchPage.java b/src/Pages/SearchPage.java
index 63ec1fa..c50ad57 100644
--- a/src/Pages/SearchPage.java
+++ b/src/Pages/SearchPage.java
@@ -4,6 +4,7 @@ public class SearchPage {

    public void search() {
        System.out.println("search page -- page class");
+       System.out.println("search page -- page class - BYEEE");
    }
}

commit 97efad94c67a9ed491288acf83bb03397510804b
Author: karanAtreya1986 <karan1988@gmail.com>
Date: Thu Jul 27 07:47:24 2023 +0200

added/updated/deleted files

diff --git a/src/Pages/LoginPage.java b/src/Pages/LoginPage.java
index 53593a2..0445a2b 100644
--- a/src/Pages/LoginPage.java
+++ b/src/Pages/LoginPage.java
@@ -4,5 +4,8 @@ public class LoginPage {

    public static void main(String a[]) {
        System.out.println("hello login page");
+       String userName="Admin";
+       String password="Adming123";
+       System.out.println("logged in .....");
    }
}
diff --git a/src/Pages/SearchPage.java b/src/Pages/SearchPage.java
new file mode 100644
index 0000000..63ec1fa
--- /dev/null
+++ b/src/Pages/SearchPage.java
@@ -0,0 +1,9 @@
```

This will show the code, what is added, what is deleted etc etc.

Note-

When there is more than one page, in git bash you press the “down arrow” to go to the next line.

See ":" is present at end which indicates it is telling you to press the "page down key" to go to the next line or next page.

```

MINGW64:/e/Naveen_GIT_Training/Cucumber/GitHubPractice
+pom.xml.bak
+release.properties
+dependency-reduced-pom.xml
+buildNumber.properties
+.mvn/timing.properties
+.mvn/wrapper/maven-wrapper.jar
+
#####
+## IntelliJ
#####
+out/
+.idea/
+.idea_modules/
+*.iml
+*.ipr
+*.iws
#####
+## Eclipse
#####
+.settings/
+bin/
+tmp/
+.metadata
+.classpath
+.project
+*.tmp
+*.bak
+*.swp
+*~.nib
+.local.properties
+.loadpath
+.factorypath
+/src/module-info.java
+
+## OS X
#####
+.DS_Store
\ No newline at end of file
diff --git a/src/Pages/HomePage.java b/src/Pages/HomePage.java
new file mode 100644
index 0000000..190ce87
--- /dev/null
+++ b/src/Pages/HomePage.java
@@ -0,0 +1,7 @@
+package Pages;
+
+public class HomePage {
+    public static void main(String a[]) {
+        System.out.println("hello home page");
+    }
+}
diff --git a/src/Pages/LoginPage.java b/src/Pages/LoginPage.java
new file mode 100644
index 0000000..53593a2
--- /dev/null
+++ b/src/Pages/LoginPage.java
@@ -0,0 +1,8 @@
:

```


21°C  
Partly sunny



Search

## Shortcut to see all commits-

```
 MINGW64:/e/Naveen_GIT_Training/Cucumber/GitHubPractice
karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git log --oneline
87e6219 (HEAD -> master, origin/master) modified page classes
97efad9 added/updated/deleted files
9fe238f first commit

karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$
```

This is a shorter version.

## To see the commits in the order they come-

```
karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$ git log --reverse
commit 9fe238f14fb40197a0866d6c7661c1d9c399e9b0
Author: karanAtreya1986 <karan1988@gmail.com>
Date:   Tue Jul 25 22:02:16 2023 +0200

    first commit

commit 97efad94c67a9ed491288acf83bb03397510804b
Author: karanAtreya1986 <karan1988@gmail.com>
Date:   Thu Jul 27 07:47:24 2023 +0200

    added/updated/files

commit 87e62193ba80dafc9b3ac16d22b594890c8ef550 (HEAD -> master, origin/master)
Author: karanAtreya1986 <karan1988@gmail.com>
Date:   Thu Jul 27 08:36:27 2023 +0200

    modified page classes

karan@LAPTOP-H560VJTV MINGW64 /e/Naveen_GIT_Training/Cucumber/GitHubPractice (master)
$
```