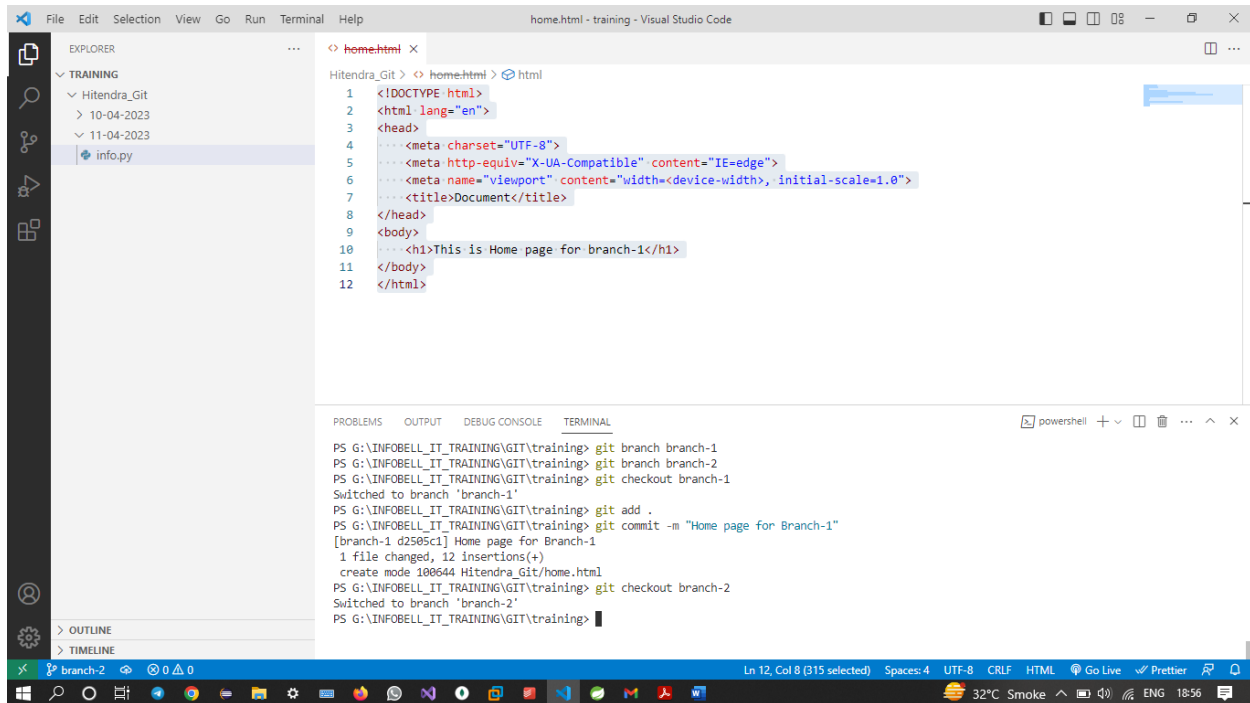


Program to understand and resolve Merge-Conflict using commands

1. Created two branches, branch-1 and branch-2. Switched to branch-1 and add home.html file in that.in second screenshot switched to branch-2 and added home.html.

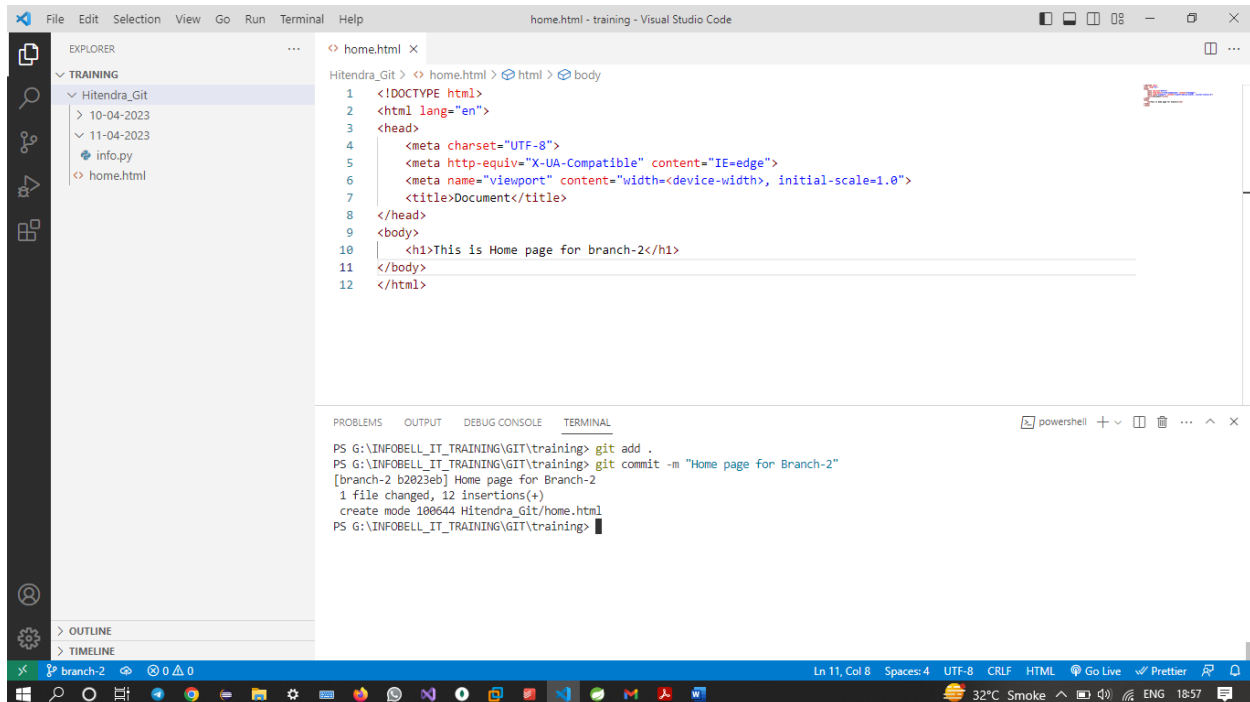


This screenshot shows the Visual Studio Code interface with the Explorer, Editor, and Terminal panels. The Explorer panel on the left shows the file structure of the 'TRAINING' folder, including 'Hitendra_Git' and its subfolders '10-04-2023' and '11-04-2023'. The Editor panel displays the 'home.html' file with the following content:

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4 <meta charset="UTF-8">
5 <meta http-equiv="X-UA-Compatible" content="IE=edge">
6 <meta name="viewport" content="width=device-width, initial-scale=1.0">
7 <title>Document</title>
8 </head>
9 <body>
10 <h1>This is Home page for branch-1</h1>
11 </body>
12 </html>
```

The Terminal panel at the bottom shows the following commands and output:

```
PS G:\INFOBELL_IT_TRAINING\GIT\training> git branch branch-1
PS G:\INFOBELL_IT_TRAINING\GIT\training> git branch branch-2
PS G:\INFOBELL_IT_TRAINING\GIT\training> git checkout branch-1
Switched to branch 'branch-1'
PS G:\INFOBELL_IT_TRAINING\GIT\training> git add .
PS G:\INFOBELL_IT_TRAINING\GIT\training> git commit -m "Home page for Branch-1"
[branch-1 d2505c1] Home page for Branch-1
1 file changed, 12 insertions(+)
create mode 100644 Hitendra.Git/home.html
PS G:\INFOBELL_IT_TRAINING\GIT\training> git checkout branch-2
Switched to branch 'branch-2'
PS G:\INFOBELL_IT_TRAINING\GIT\training>
```



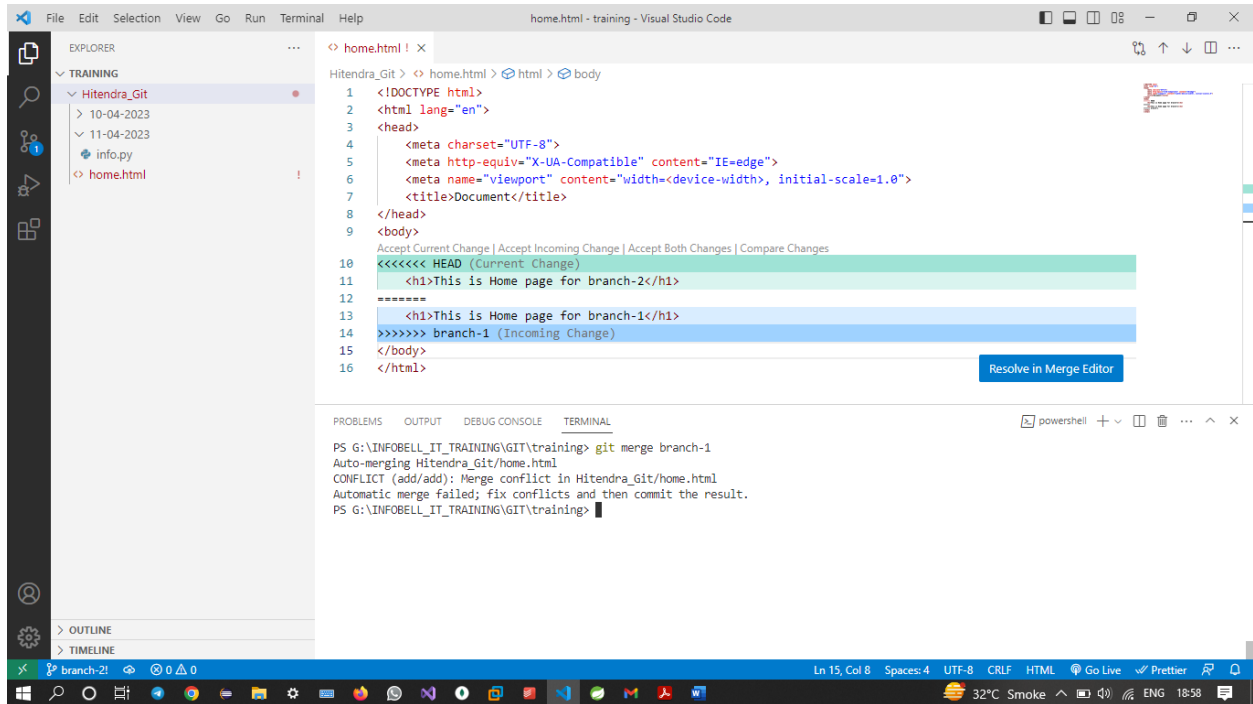
This screenshot shows the Visual Studio Code interface with the Explorer, Editor, and Terminal panels. The Explorer panel on the left shows the file structure of the 'TRAINING' folder, including 'Hitendra_Git' and its subfolders '10-04-2023' and '11-04-2023'. The Editor panel displays the 'home.html' file with the following content:

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4 <meta charset="UTF-8">
5 <meta http-equiv="X-UA-Compatible" content="IE=edge">
6 <meta name="viewport" content="width=device-width, initial-scale=1.0">
7 <title>Document</title>
8 </head>
9 <body>
10 <h1>This is Home page for branch-2</h1>
11 </body>
12 </html>
```

The Terminal panel at the bottom shows the following commands and output:

```
PS G:\INFOBELL_IT_TRAINING\GIT\training> git add .
PS G:\INFOBELL_IT_TRAINING\GIT\training> git commit -m "Home page for Branch-2"
[branch-2 b2023eb] Home page for Branch-2
1 file changed, 12 insertions(+)
create mode 100644 Hitendra.Git/home.html
PS G:\INFOBELL_IT_TRAINING\GIT\training>
```

2. Tried to merge branch-1 with branch-2. However as both has home.html file it created conflict as shown below.

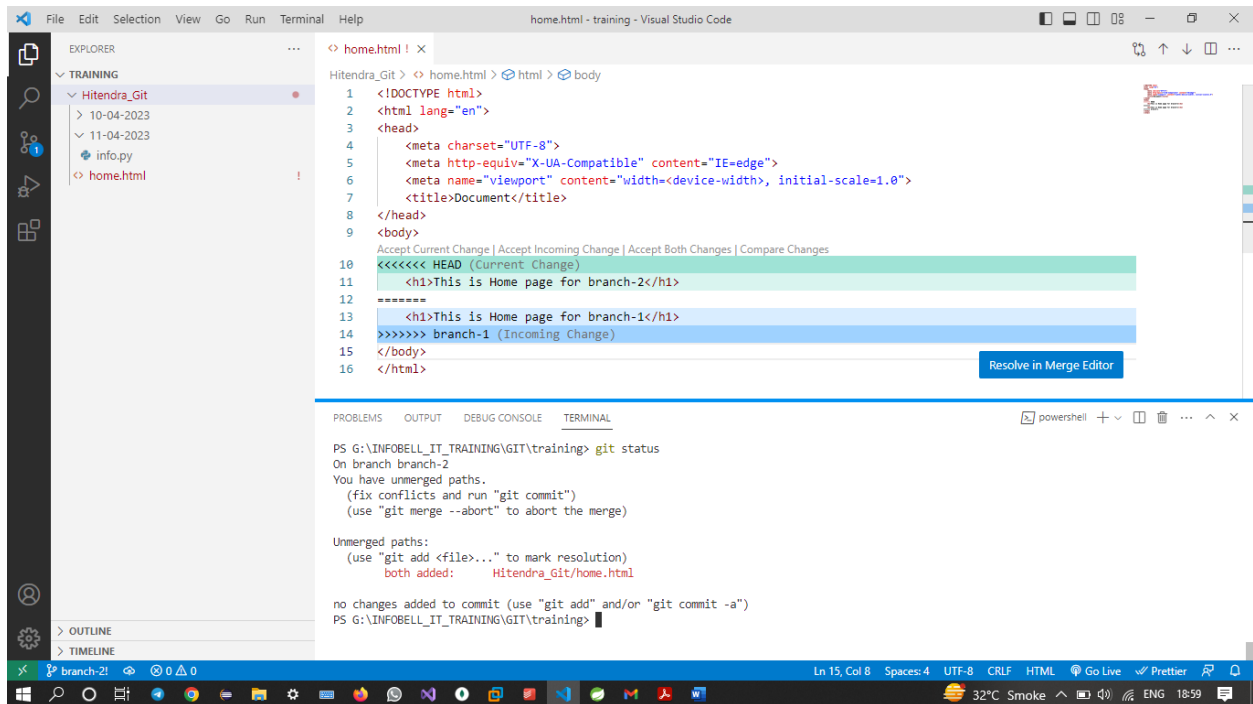


```
Hitendra_Git > < home.html > html > body
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta http-equiv="X-UA-Compatible" content="IE=edge">
6   <meta name="viewport" content="width=device-width, initial-scale=1.0">
7   <title>Document</title>
8 </head>
9 <body>
10 <<<<<< HEAD (Current Change)
11 <h1>This is Home page for branch-2</h1>
12 =====
13 <h1>This is Home page for branch-1</h1>
14 >>>>>> branch-1 (Incoming Change)
15 </body>
16 </html>
```

Resolve in Merge Editor

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
PS G:\INFOBELL_IT_TRAINING\GIT\training> git merge branch-1
Auto-merging Hitendra_Git/home.html
CONFLICT (add/add): Merge conflict in Hitendra_Git/home.html
Automatic merge failed; fix conflicts and then commit the result.
PS G:\INFOBELL_IT_TRAINING\GIT\training>
```



```
Hitendra_Git > < home.html > html > body
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta http-equiv="X-UA-Compatible" content="IE=edge">
6   <meta name="viewport" content="width=device-width, initial-scale=1.0">
7   <title>Document</title>
8 </head>
9 <body>
10 <<<<<< HEAD (Current Change)
11 <h1>This is Home page for branch-2</h1>
12 =====
13 <h1>This is Home page for branch-1</h1>
14 >>>>>> branch-1 (Incoming Change)
15 </body>
16 </html>
```

Resolve in Merge Editor

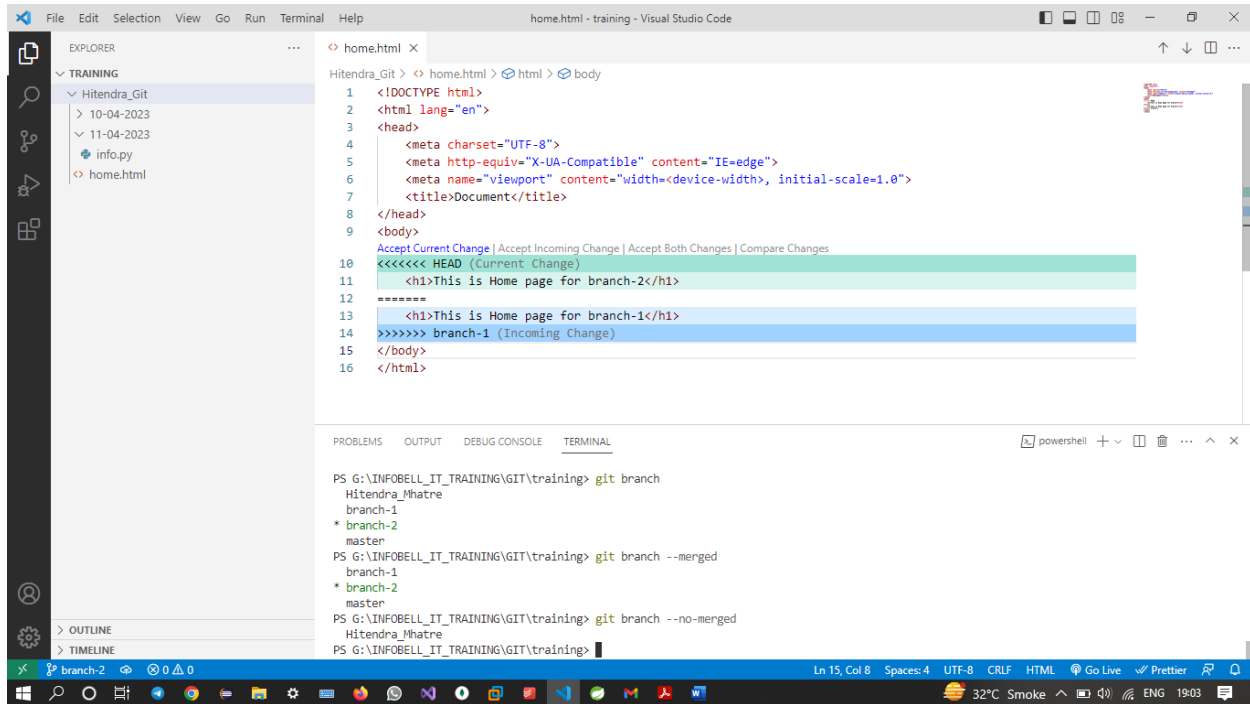
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
PS G:\INFOBELL_IT_TRAINING\GIT\training> git status
On branch branch-2
You have unmerged paths.
(fix conflicts and run "git commit")
(use "git merge --abort" to abort the merge)

Unmerged paths:
  (use "git add <file>..." to mark resolution)
    both added:   Hitendra_Git/home.html

no changes added to commit (use "git add" and/or "git commit -a")
PS G:\INFOBELL_IT_TRAINING\GIT\training>
```

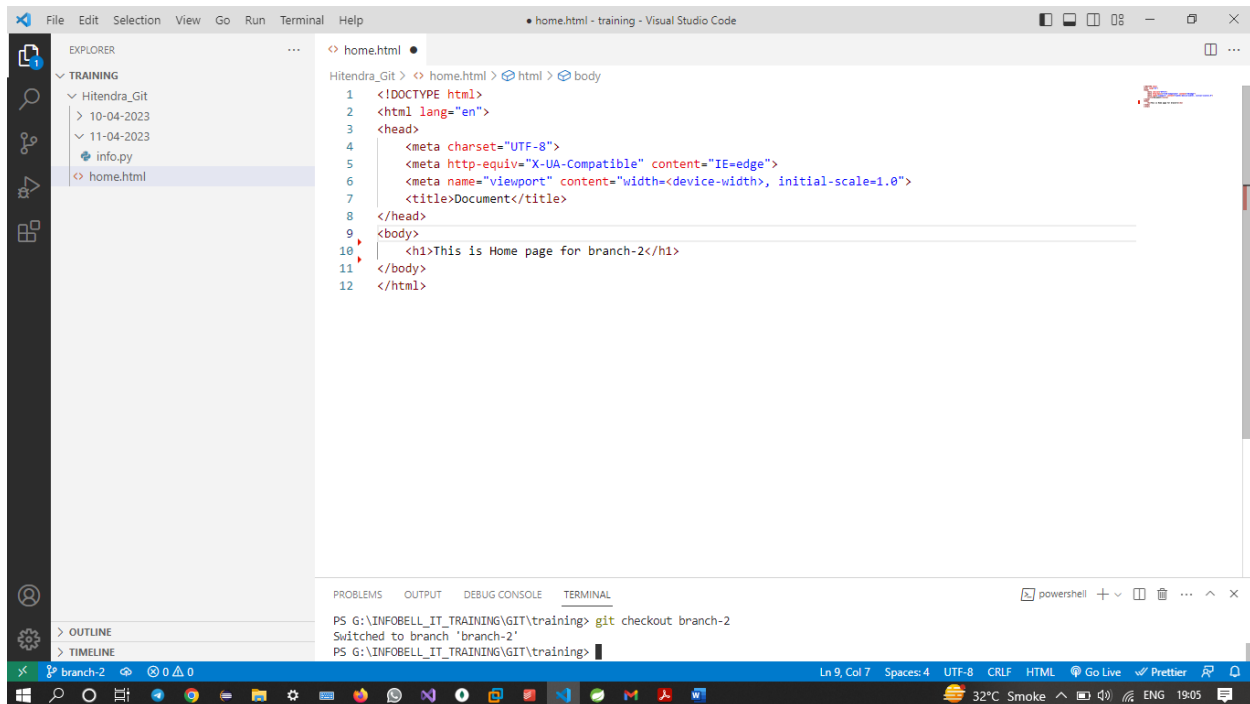
3. Now we need to resolve conflict. Here I have clicked on accept current changes to accept changes and hence resolved conflict.



```
Hitendra_Git > <> home.html > html > body
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta http-equiv="X-UA-Compatible" content="IE=edge">
6   <meta name="viewport" content="width=device-width, initial-scale=1.0">
7   <title>Document</title>
8 </head>
9 <body>
10 <<<<<< HEAD (Current Change)
11 <h1>This is Home page for branch-2</h1>
12 =====
13 <h1>This is Home page for branch-1</h1>
14 >>>>>> branch-1 (Incoming Change)
15 </body>
16 </html>
```

```
PS G:\INFOBELL_IT_TRAINING\GIT\training> git branch
Hitendra_Mhatre
branch-1
* branch-2
master
PS G:\INFOBELL_IT_TRAINING\GIT\training> git branch --merged
branch-1
* branch-2
master
PS G:\INFOBELL_IT_TRAINING\GIT\training> git branch --no-merged
Hitendra_Mhatre
PS G:\INFOBELL_IT_TRAINING\GIT\training>
```

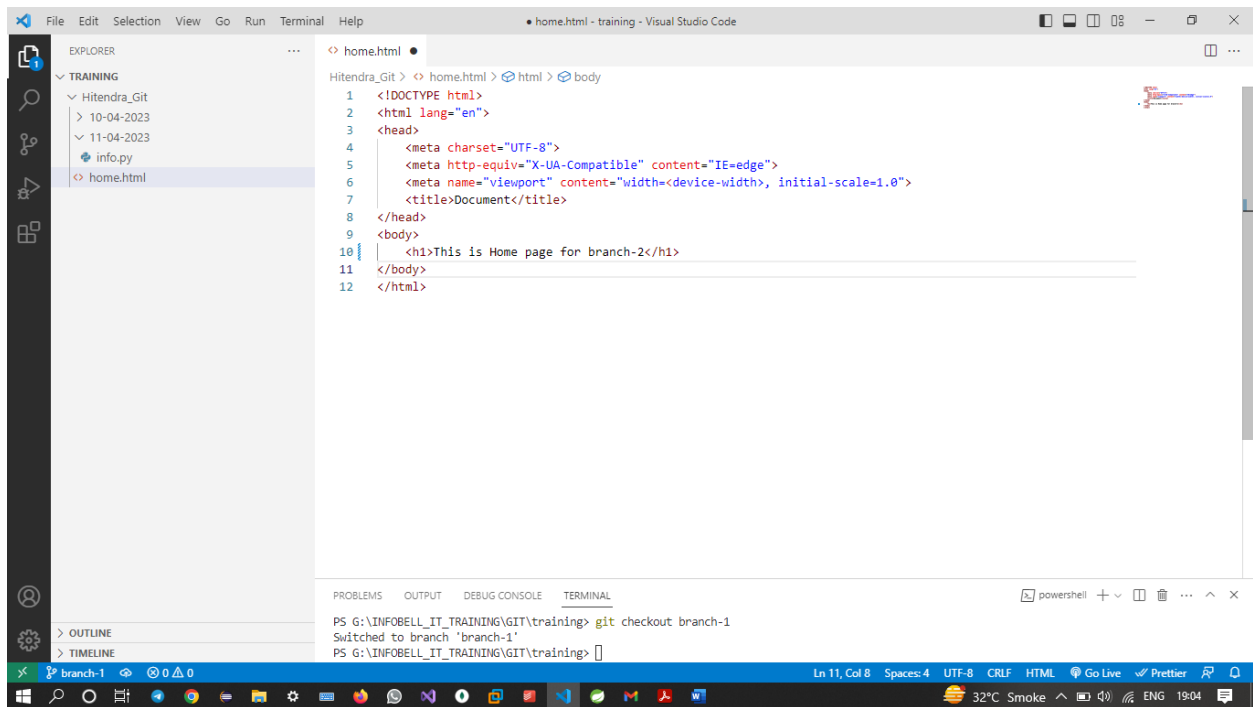
4. Branch-2 home.html page



```
Hitendra_Git > <> home.html > html > body
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta http-equiv="X-UA-Compatible" content="IE=edge">
6   <meta name="viewport" content="width=device-width, initial-scale=1.0">
7   <title>Document</title>
8 </head>
9 <body>
10 <h1>This is Home page for branch-2</h1>
11 </body>
12 </html>
```

```
PS G:\INFOBELL_IT_TRAINING\GIT\training> git checkout branch-2
Switched to branch 'branch-2'
PS G:\INFOBELL_IT_TRAINING\GIT\training>
```

5. Branch-1 home.html file



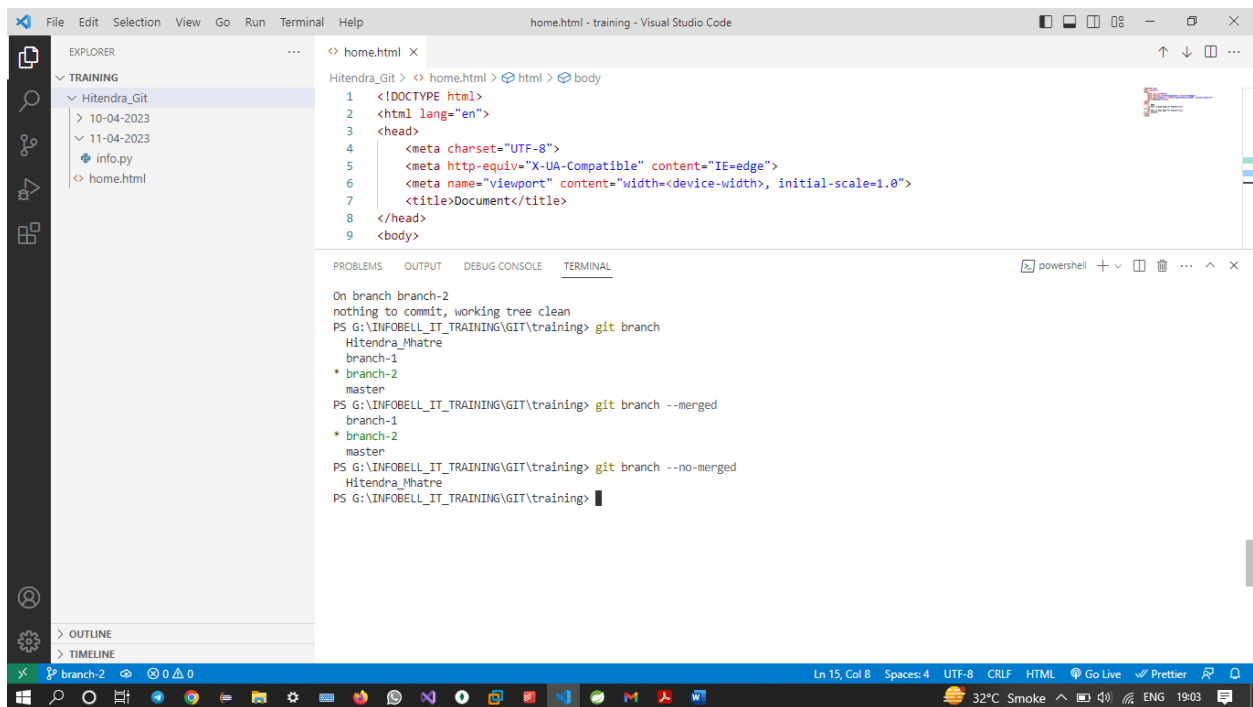
```
File Edit Selection View Go Run Terminal Help
home.html - training - Visual Studio Code

EXPLORER
TRAINING
  Hitendra_Git
    10-04-2023
    11-04-2023
    info.py
    home.html

home.html
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta http-equiv="X-UA-Compatible" content="IE=edge">
6   <meta name="viewport" content="width=device-width, initial-scale=1.0">
7   <title>Document</title>
8 </head>
9 <body>
10   <h1>This is Home page for branch-2</h1>
11 </body>
12 </html>

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
PS G:\INFOBELL_IT_TRAINING\GIT\training> git checkout branch-1
Switched to branch 'branch-1'
PS G:\INFOBELL_IT_TRAINING\GIT\training>
```

6. List of all branches, Merged branches and non-merged branches



```
File Edit Selection View Go Run Terminal Help
home.html - training - Visual Studio Code

EXPLORER
TRAINING
  Hitendra_Git
    10-04-2023
    11-04-2023
    info.py
    home.html

home.html
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta http-equiv="X-UA-Compatible" content="IE=edge">
6   <meta name="viewport" content="width=device-width, initial-scale=1.0">
7   <title>Document</title>
8 </head>
9 <body>

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
On branch branch-2
nothing to commit, working tree clean
PS G:\INFOBELL_IT_TRAINING\GIT\training> git branch
Hitendra_Mhatre
branch-1
* branch-2
master
PS G:\INFOBELL_IT_TRAINING\GIT\training> git branch --merged
branch-1
* branch-2
master
PS G:\INFOBELL_IT_TRAINING\GIT\training> git branch --no-merged
Hitendra_Mhatre
PS G:\INFOBELL_IT_TRAINING\GIT\training>
```