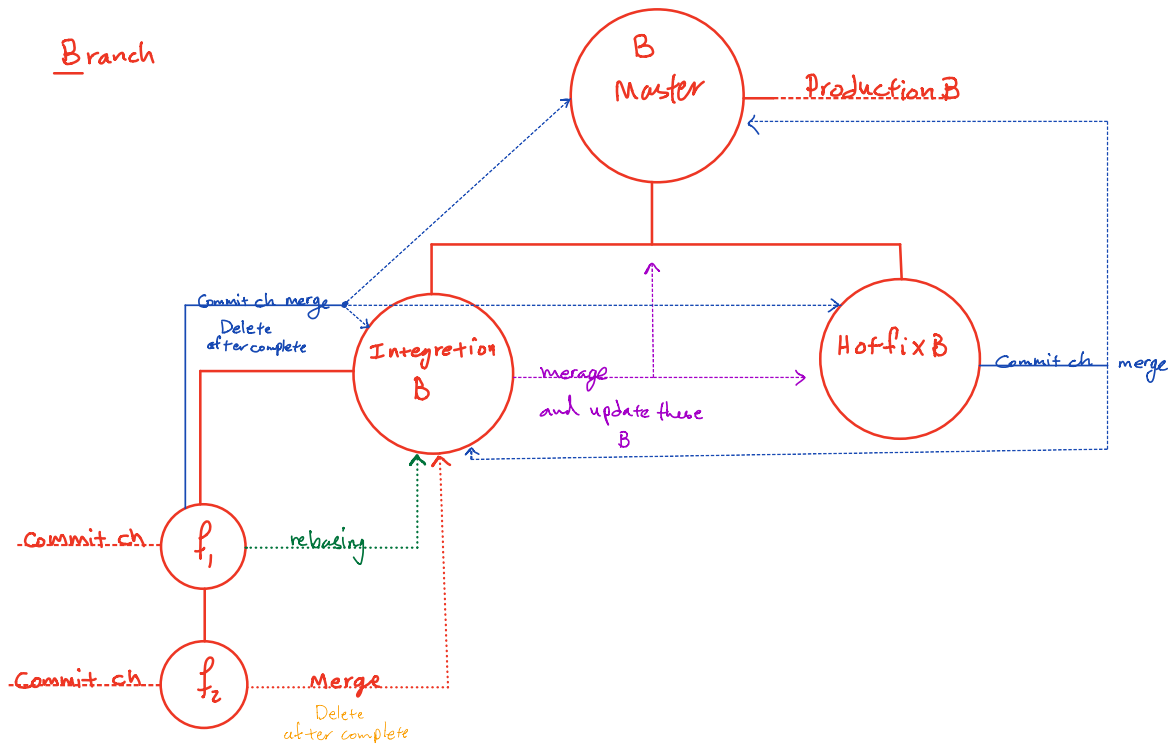
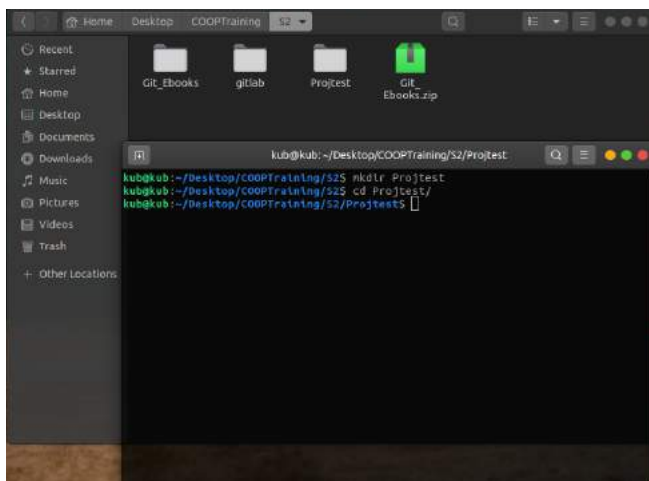


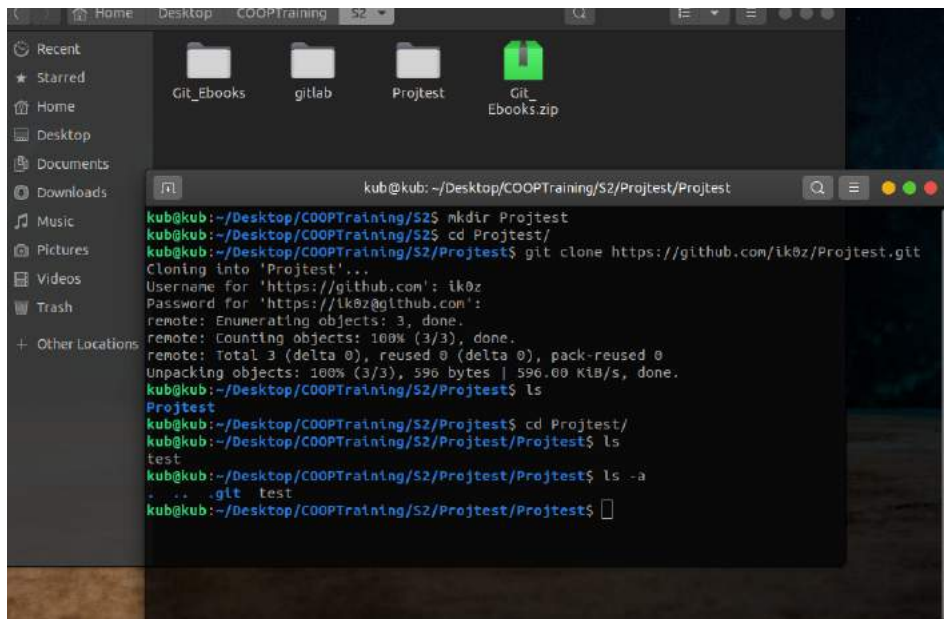
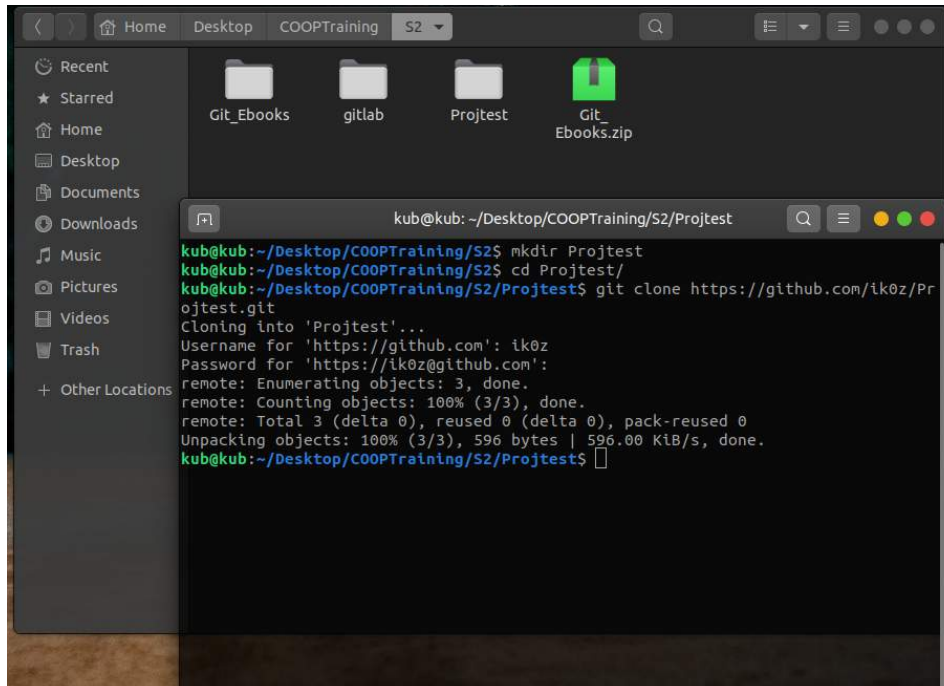
Branch

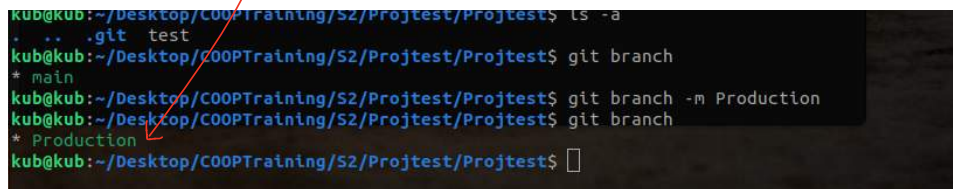
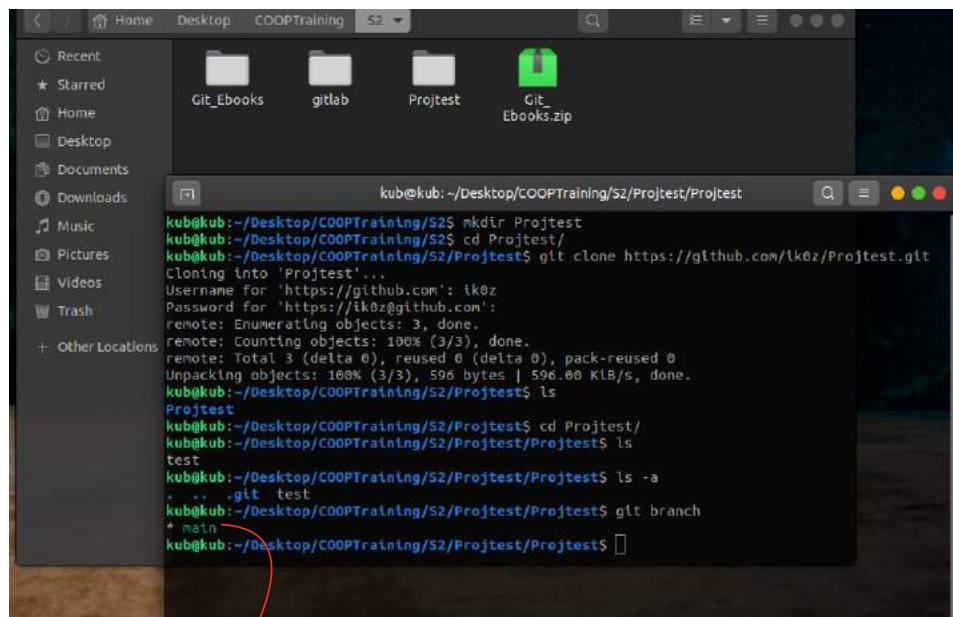


Khaled Mofdh AISHAMMRI

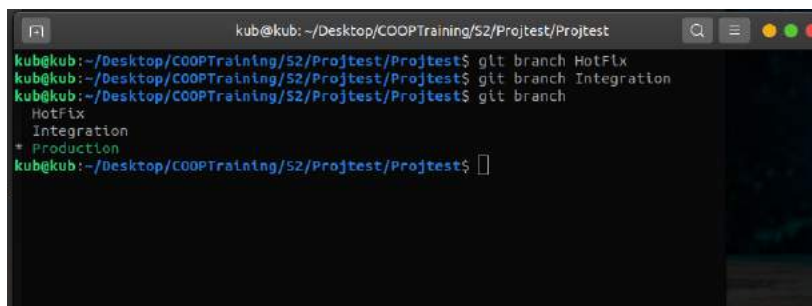
Email : i5irh.a@gmail.com







- Start with the Production branch (master branch), and then create a HotFix and Integration branch



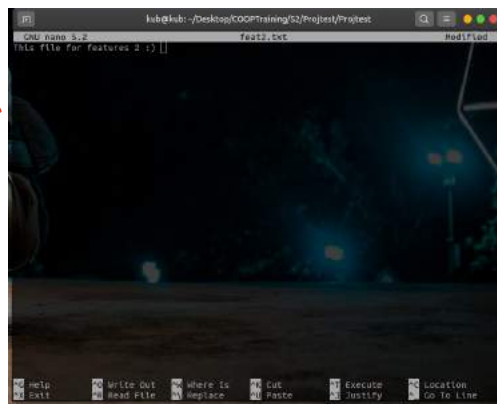
- Subsequently, create Feature 1 and 2 branches that integrate to the Integration branch as shown in the above figure

```
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git checkout Integration
Switched to branch 'Integration'
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git branch
  HotFix
* Integration
  Production
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git branch Feature1
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git branch Feature2
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git branch
  Feature1
  Feature2
  HotFix
* Integration
  Production
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$
```

- Commit some changes in the Feature 2 branch and merge it into the Integration branch. Delete this branch once merging is complete

```
feat1.txt test
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git checkout Feature2
Switched to branch 'Feature2'
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git branch
  Feature1
* Feature2
  HotFix
  Integration
  Production
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ touch feat2.txt
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ sudo nano feat2.txt

kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git add feat2.txt
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git commit -m "commit features 2 file "
[Feature2 cbffe9] commit features 2 file
1 file changed, 1 insertion(+)
create mode 100644 feat2.txt
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$
```



```
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git branch
  Feature1
* Feature2
  HotFix
  Integration
  Production

kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git checkout Integration
Switched to branch 'Integration'

kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git branch
  Feature1
  Feature2
  HotFix
* Integration
  Production

kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git merge Feature2
Updating 521d07f..cbff1e9
Fast-forward
 feat2.txt | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 feat2.txt

kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git branch -d Feature2
Deleted branch Feature2 (was cbff1e9).

kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$
```

- Commit some changes in the Feature 1 branch and rebase it to the Integration branch

```
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git branch
Feature1
Feature2
HotFix
* Integration
Production

kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git checkout Feature1
Switched to branch 'Feature1'

kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git branch
* Feature1
Feature2
HotFix
Integration
Production

kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$
```

```
Switched to branch 'Feature1'
kubgkub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git branch
* Feature1
  Feature2
  HotFix
  Integration
  Production
kubgkub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ touch feat1.txt
kubgkub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ sudo nano feat1.txt
[sudo] password for kub:
kubgkub:~/Desktop/COOPTraining/S2/Projtest/Projtest$
```




```
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git checkout Feature1
Switched to branch 'Feature1'
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git branch
* Feature1
  HotFix
  Integration
  Production
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git rebase Integration
Successfully rebased and updated refs/heads/Feature1.
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$
```

- Merge the Integration branch into Hotfix and Production branch to update these branches

```
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git branch
  Feature1
* HotFix
  Integration
  Production
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git merge Integration
Updating 521d07f..cbff1e9
Fast-forward
 feat2.txt | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 feat2.txt
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git checkout Production
Switched to branch 'Production'
Your branch is up to date with 'origin/main'.
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git branch
  Feature1
  HotFix
  Integration
* Production
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git merge Integration
Updating 521d07f..cbff1e9
Fast-forward
 feat2.txt | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 feat2.txt
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$
```

- Commit some changes in Feature 1 branch, and then merge it into Integration, Hotfix, and Production branch. Delete this branch once merging is complete

```

kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git checkout Feature1
Switched to branch 'Feature1'
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ ls -la
.  ..  feat1.txt  feat2.txt  .git  test
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ sudo nano feat1.txt
[sudo] password for kub:
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$

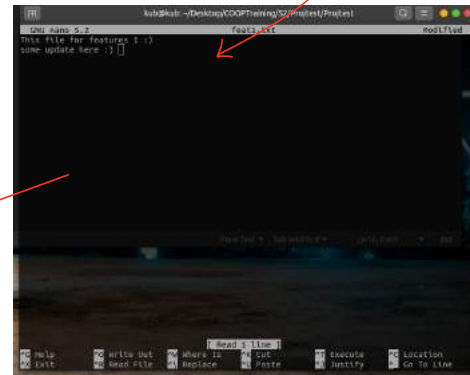
```

```

kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git branch
* Feature1
  HotFix
  Integration
  Production
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git commit -m "Some update in Features 1"
On branch Feature1
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:   feat1.txt

no changes added to commit (use "git add" and/or "git commit -a")
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git add feat1.txt
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git commit -m "Some update in Features 1"
[Feature1 1d848dd] Some update in Features 1
1 file changed, 1 insertion(+)
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$

```



```

kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git branch
* Feature1
  HotFix
  Integration
  Production
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git checkout Integration
Switched to branch 'Integration'
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git merge Feature1
Updating cbff1e9..1d848dd
Fast-forward
 feat1.txt | 2 ++
 1 file changed, 2 insertions(+)
 create mode 100644 feat1.txt
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$

```

```

kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git checkout HotFix
Switched to branch 'HotFix'
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git branch
* Feature1
  HotFix
  Integration
  Production
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git merge Feature1
Updating cbff1e9..1d848dd
Fast-forward
 feat1.txt | 2 ++
 1 file changed, 2 insertions(+)
 create mode 100644 feat1.txt
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git check

```

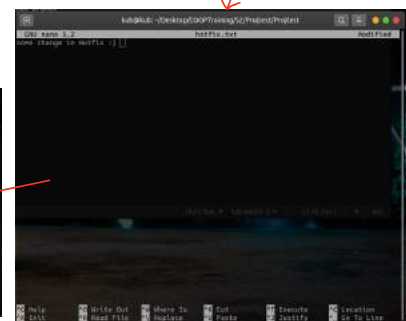
```
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git checkout Production
Switched to branch 'Production'
Your branch is ahead of 'origin/main' by 1 commit.
(use "git push" to publish your local commits)
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git branch
  Feature1
  HotFix
  Integration
* Production
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git merge Feature1
Updating cbff1e9..1d848dd
Fast-forward
 feat1.txt | 2 ++
 1 file changed, 2 insertions(+)
 create mode 100644 feat1.txt
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$
```

```
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git branch -d Feature1
Deleted branch Feature1 (was 1d848dd).
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$
```

- Commit some changes in the Hotfix branch and merge it into the Production as well as the Integration branch

```
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git checkout HotFix
Switched to branch 'HotFix'
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git branch
* HotFix
  Integration
  Production
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ touch hotfix.txt
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ sudo nano hotfix.txt
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git add hotfix.txt
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git commit -m "commit in Hotfix"
[HotFix cd9c615] commit in Hotfix
 1 file changed, 1 insertion(+)
 create mode 100644 hotfix.txt
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$
```

```
Production
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git checkout Integration
Switched to branch 'Integration'
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git branch
  HotFix
* Integration
  Production
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git merge HotFix
Updating 1d848dd..cd9c615
Fast-forward
 hotfix.txt | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 hotfix.txt
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$
```




```
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git branch
  HotFix
  Integration
* Production
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$ git merge HotFix
Updating 1d848dd..cd9c615
Fast-forward
 hotfix.txt | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 hotfix.txt
kub@kub:~/Desktop/COOPTraining/S2/Projtest/Projtest$
```