First Name: _____Ahram_____
Last Name: _____Kim_____

Midterm 1 – Git Rebase Example with Two Merge Conflicts

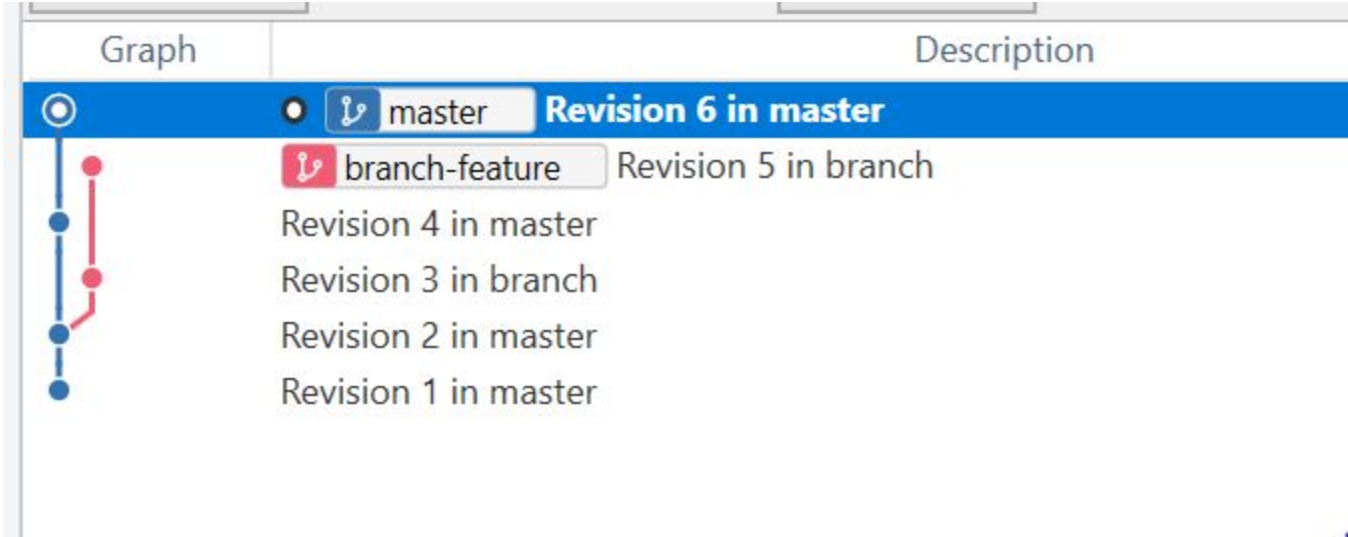## GIT_VISUALIZATION_ALL_BRANCHES after completing Step 6:

Figure 1: Example of visualizing all branches in a git repository

GIT_COMMAND_LINE_OUTPUT after completing Step 7:

```
ahram@DESKTOP-SIV5F8V MINGW64 ~/Desktop/CSWorkspace/CS471/Midterm/ExampleGitRebase (master)
$ git checkout branch-feature
Switched to branch 'branch-feature'

ahram@DESKTOP-SIV5F8V MINGW64 ~/Desktop/CSWorkspace/CS471/Midterm/ExampleGitRebase (branch-feature)
$ git rebase master
First, rewinding head to replay your work on top of it...
Applying: Revision 3 in branch
Using index info to reconstruct a base tree...
M       Main.java
Falling back to patching base and 3-way merge...
Auto-merging Main.java
CONFLICT (content): Merge conflict in Main.java
error: Failed to merge in the changes.
Patch failed at 0001 Revision 3 in branch
The copy of the patch that failed is found in: .git/rebase-apply/patch

When you have resolved this problem, run "git rebase --continue".
If you prefer to skip this patch, run "git rebase --skip" instead.
To check out the original branch and stop rebasing, run "git rebase --abort".
```

Figure 2: Example of visualizing the output of a git command in the command line

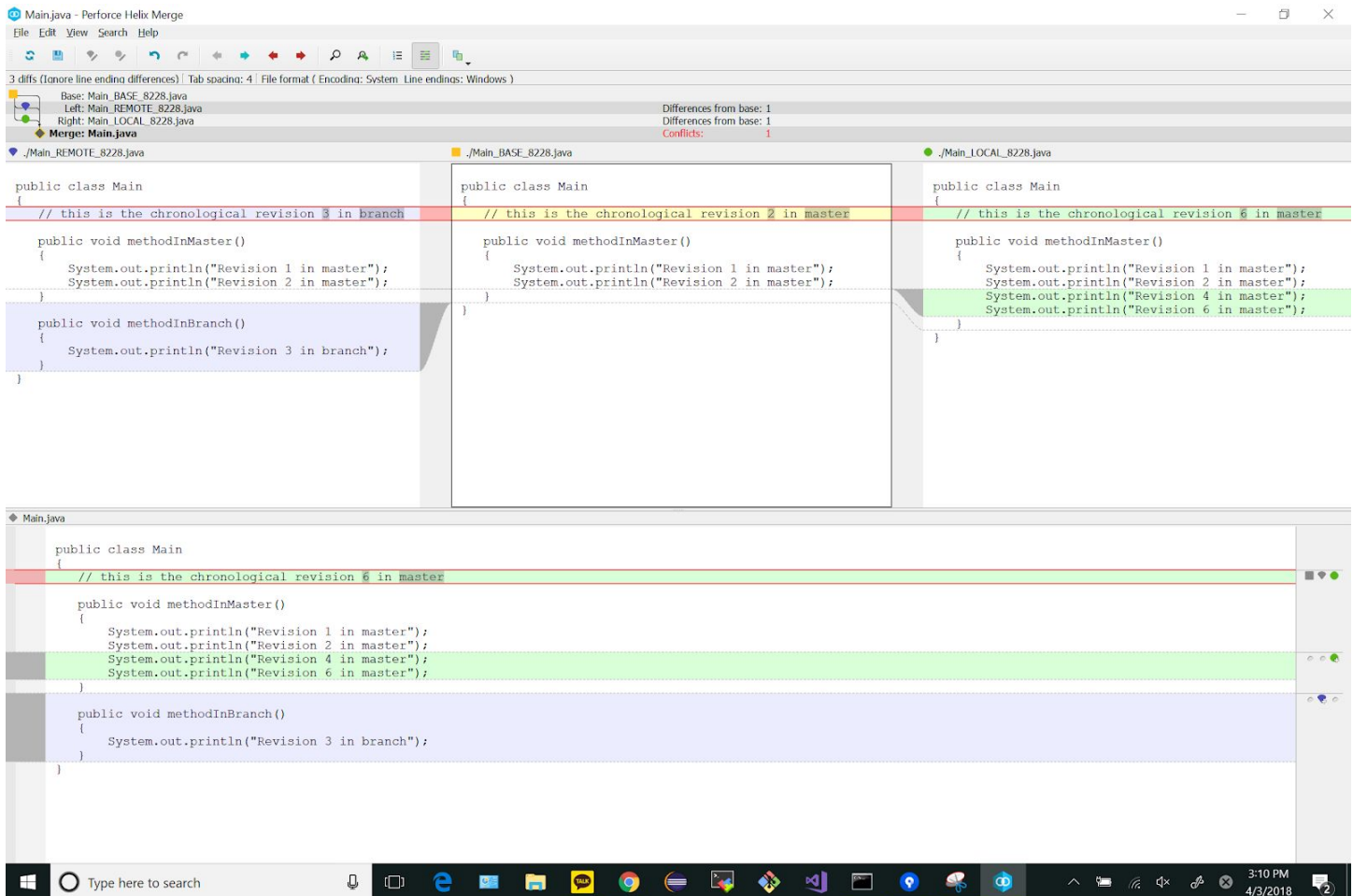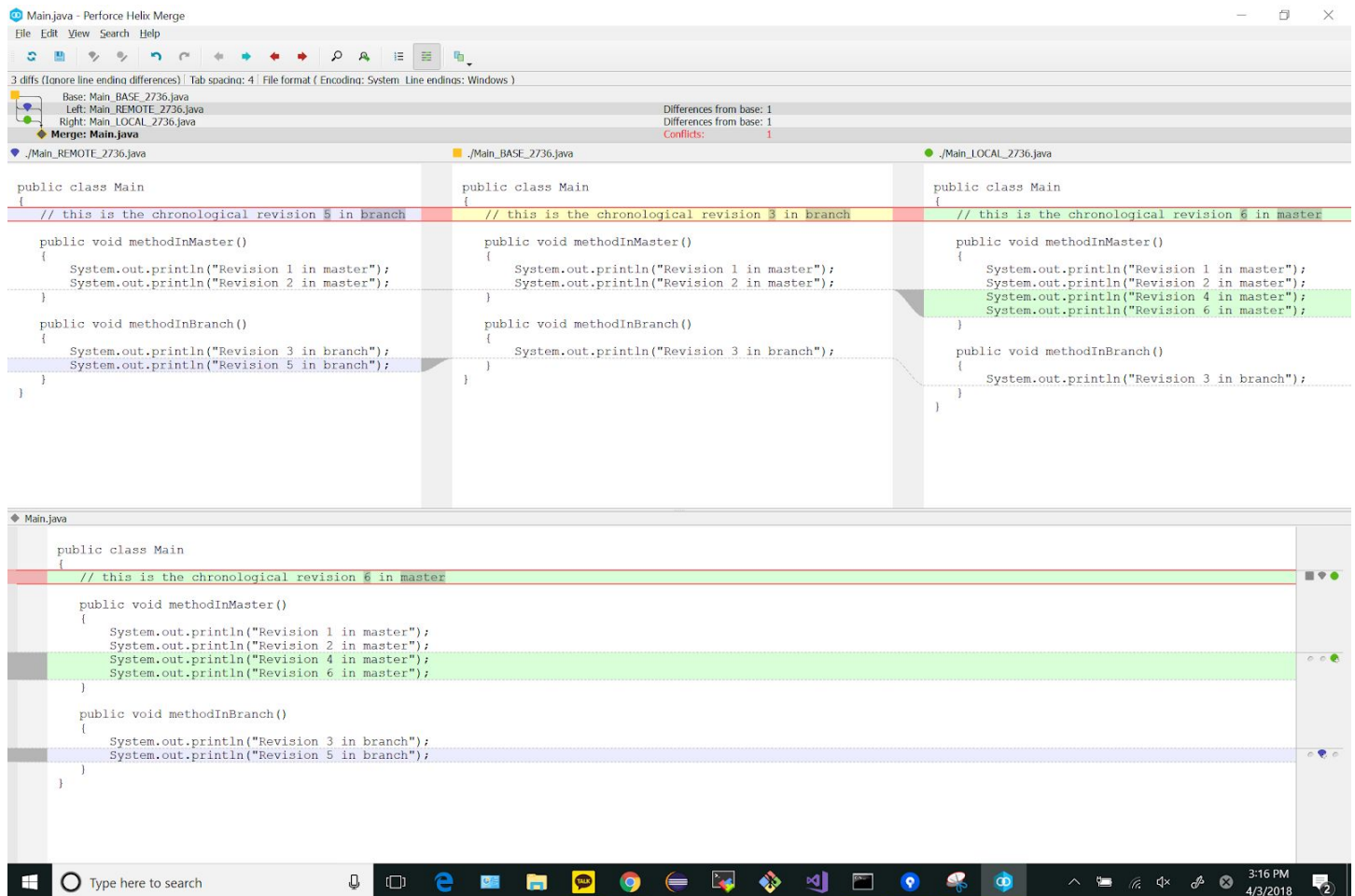## GIT_MERGE_CONFLICT_VISUALIZATION after completing Step 9:

Figure 3: Example of solving a merge conflict for Main.java file using the 3-way-merge conflict tool

GIT_COMMAND_LINE_OUTPUT after completing Step 10:

Figure 4: Example of visualizing the output of a git command in the command line

First Name: _____Ahram_____
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GIT_COMMAND_LINE_OUTPUT after completing Step 11:

```
ahram@DESKTOP-SIV5F8V MINGW64 ~/Desktop/CSWorkspace/CS471/Midterm/ExampleGitRebase (branch-feature|REBASE 1/2)
$ git rebase --continue
Applying: Revision 3 in branch
Applying: Revision 5 in branch
Using index info to reconstruct a base tree...
M       Main.java
Falling back to patching base and 3-way merge...
Auto-merging Main.java
CONFLICT (content): Merge conflict in Main.java
error: Failed to merge in the changes.
Patch failed at 0002 Revision 5 in branch
The copy of the patch that failed is found in: .git/rebase-apply/patch

When you have resolved this problem, run "git rebase --continue".
If you prefer to skip this patch, run "git rebase --skip" instead.
To check out the original branch and stop rebasing, run "git rebase --abort".
```

Figure 5: Example of visualizing the output of a git command in the command line

GIT_MERGE_CONFLICT_VISUALIZATION after completing Step 12:

Figure 6: Example of solving a merge conflict for Main.java file using the 3-way-merge conflict tool

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GIT_COMMAND_LINE_OUTPUT after completing Step 13:

```
ahram@DESKTOP-SIV5F8V MINGW64 ~/Desktop/CSWorkspace/CS471/Midterm/ExampleGitRebase (branch-feature|REBASE 2/2)
$ git status
rebase in progress; onto 0d2a7e9
You are currently rebasing branch 'branch-feature' on '0d2a7e9'.
  (all conflicts fixed: run "git rebase --continue")

Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)

        modified:   Main.java
```

Figure 7: Example of visualizing the output of a git command in the command line

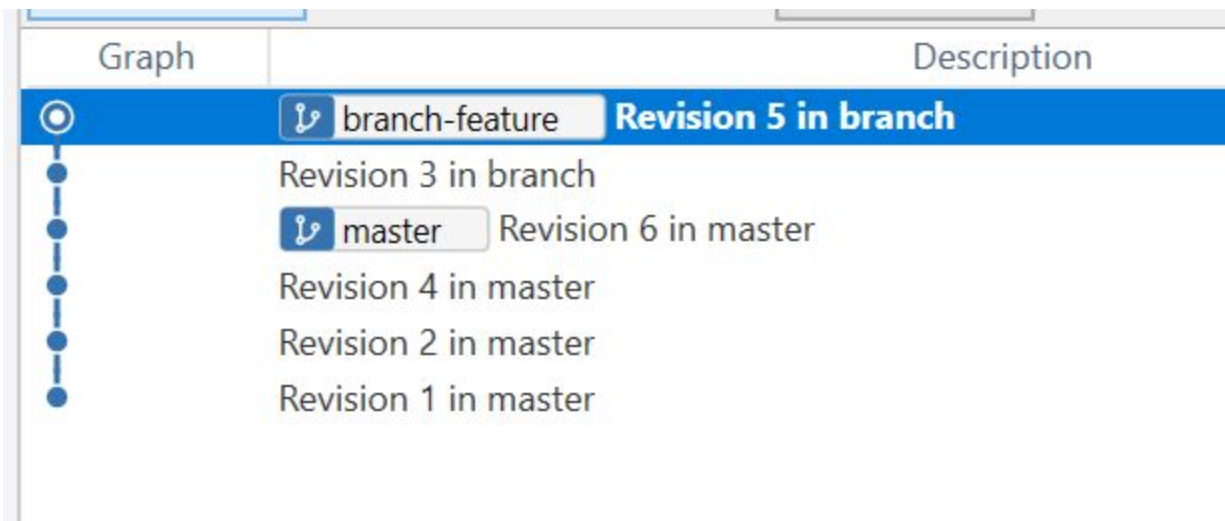**GIT_VISUALIZATION_ALL_BRANCHES after completing Step 14:**

Figure 8: Example of solving a merge conflict for Main.java file using the 3-way-merge conflict tool

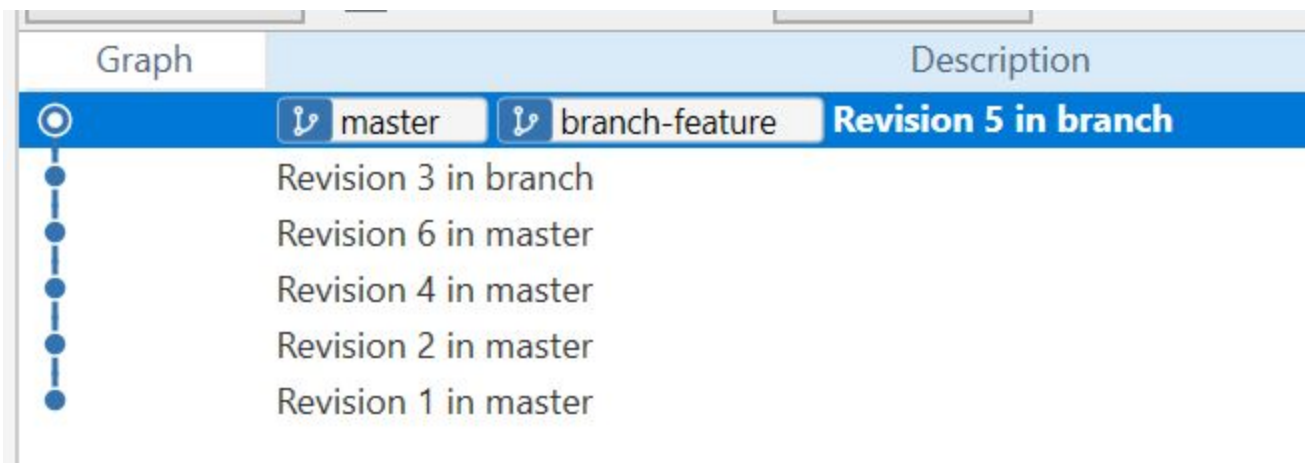**GIT_VISUALIZATION_ALL_BRANCHES after completing Step 15:**

Figure 9: Example of solving a merge conflict for Main.java file using the 3-way-merge conflict tool

First Name: _____Ahram_____

Last Name: _____Kim_____

GIT_VISUALIZATION_ALL_BRANCHES after completing Step 16:

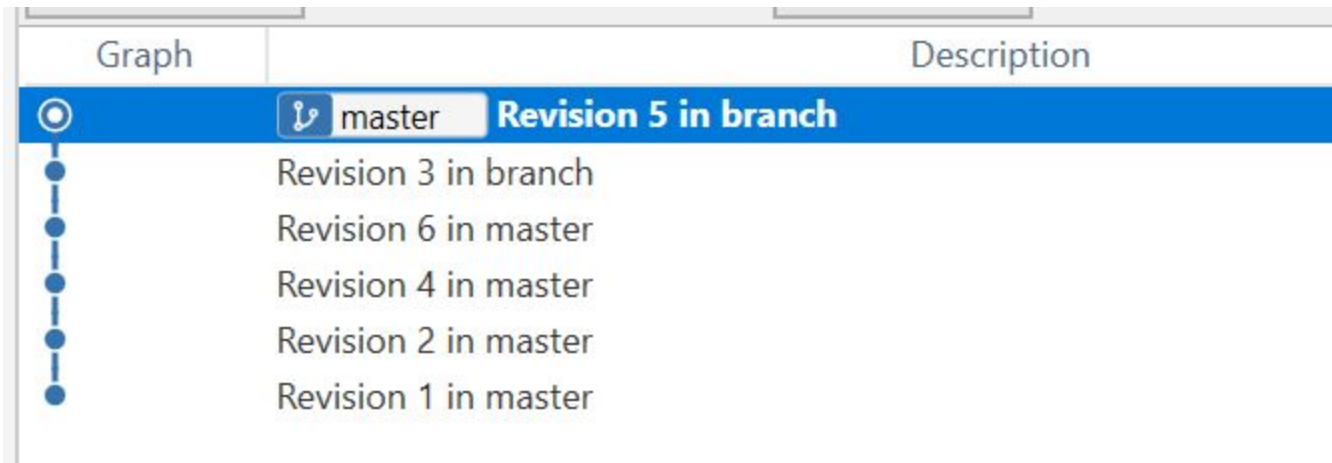| Graph	Description
⦿	🜉 master **Revision 5 in branch**
	Revision 3 in branch
	Revision 6 in master
	Revision 4 in master
	Revision 2 in master
	Revision 1 in master

Figure 10: Example of solving a merge conflict for Main.java file using the 3-way-merge conflict tool