Git Commands for Remote Repos

Consider this Git log graph (log messages omitted). Assume that origin refers to a remote GitHub repo, and assume that each local branch is tracking with respect to its corresponding remote branch.

```
* da599e4 (HEAD -> master)
|\
 * c8bf324 (origin/iss1, iss1)
| |\
 /|
* | f917a58 (origin/master)
|\ \
 * | b87b94c (origin/iss2, iss2)
/ /
 * 38d0358
* 119777f
//
* f85d923
```

What does (origin/master) denote?

What is the difference between iss2 and origin/iss2?

Consider this Git log graph (log messages omitted). Assume that origin refers to a remote GitHub repo, and assume that each local branch is tracking with respect to its corresponding remote branch.

```
da599e4 (HEAD -> master)
*
 ١
      c8bf324 (origin/iss1, iss1)
  *
   ١
 /
      f917a58 (origin/master)
*
     b87b94c (origin/iss2, iss2)
  *
 /
   /
    38d0358
  *
   119777f
  *
*
 f85d923
```

List each branch for which the version history is exactly the same in the local repository as it is in the remote repository.

List each branch for which the version history is different in the local repository than it is in the remote repository.

Consider this Git log graph (log messages omitted). Assume that origin refers to a remote GitHub repo, and assume that each local branch is tracking with respect to its corresponding remote branch.

```
da599e4 (HEAD -> master)
*
 \
      c8bf324 (origin/iss1, iss1)
  *
   /
/
      f917a58 (origin/master)
*
 \
     b87b94c (origin/iss2, iss2)
  *
 /
   /
   38d0358
  *
   119777f
  *
 /
*
 f85d923
```

Which commits are only in the local repo and not in the remote repo?

Which commits are only in the remote repo and not in the local repo?

Consider this Git log graph (log messages omitted). Assume that origin refers to a remote GitHub repo, and assume that each local branch is tracking with respect to its corresponding remote branch.

```
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|\
 * c8bf324 (origin/iss1, iss1)
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// /
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* 119777f
//
* f85d923
```

Which of the following would git status report?

- a) Your branch is up-to-date with 'origin/master'
- b) Your branch is ahead of 'origin/master'
- c) Your branch is behind 'origin/master'

What would happen if the developer ran git checkout origin/iss1?

Which Git command will download all the latest remote branch log data?

Each of the following problems presents a Git log graph (log messages omitted) of a local repo and a scenario. Give the updated graph that would result from each scenario.

- If you need to add a commit, use the hash clclc.
- If a command would be rejected by GitHub (e.g., because the remote contains work that you do not have locally), write "REJECTED" on the top line.
- Assume that all remote bookmarks depicted are up to date.
- Assume that all issue branches are tracking with their corresponding branches on the remote.

Scenario: Developer makes changes to the code, stages the changes, and commits.

```
* d3994b3 (HEAD -> iss13, origin/iss13)
* | 0152ac4 (origin/master, master)
|/
* 77a9025
```

Scenario: Developer runs git push.

* d3994b3 (HEAD -> iss9)
* | 0152ac4 (origin/master, master)
|/
* 77a9025 (origin/iss9)

Scenario: Developer runs git push.

* 79bb885 (HEAD -> iss20)
* | 33a99ac (origin/iss20, master)
|/
* d23531d (origin/master)

Scenario: Developer runs git pull. Assume that auto-merge, if used, would complete successfully with no merge conflicts.

* d3994b3 (origin/iss9)
* | 0152ac4 (origin/master, master)
|/
* 77a9025 (HEAD -> origin/iss9)

Scenario: Developer runs git pull. Assume that auto-merge, if used, would complete successfully with no merge conflicts.

```
* 79bb885 (origin/iss20)
* | 33a99ac (HEAD -> iss20, master)
|/
* d23531d (origin/master)
```

Scenario: Developer runs git pull origin master. Assume that auto-merge, if used, would complete successfully with no merge conflicts.

* a3b25e7 (origin/master)
* e41c5b6 (master)
* 9d63832 (HEAD -> iss8)
* 40f26d8 (origin/iss8)

Scenario: Developer runs git pull origin master. Assume that auto-merge, if used, would complete successfully with no merge conflicts.

```
* d3994b3 (HEAD -> iss19, origin/iss19)
* | 0152ac4 (origin/master, master)
|/
* 77a9025
```