```bash
#!/bin/bash
#/* **************** Cousera/lab_rebase.sh **************** */
#/*
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# *
# */
#!/bin/bash

# initialize the repository and put our name and email in the .config file

echo -e "\n\n**************    CREATING THE REPOSITORY AND CONFIGURING IT\n\n"

rm -rf git-test ; mkdir git-test ; cd git-test
git init
git config user.name "A Smart Guy"
git config user.email "asmartguy@linux.com"

echo -e "\n\n**************    CREATING A COUPLE OF FILES AND ADDING THEM TO THE PROJECT AND
COMMITTING\n\n"

# create a couple of files and add them to the project, and then commit

echo file1 > file1
echo file2 > file2
git add file1 file2
git commit . -m "This is our first commit"

# create a new development branch

echo -e "\n\n**************** CREATING A NEW BRANCH, devel ***\n\n"

git branch devel

# checkout the new branch

echo -e "\n\n*************** CHECKOUT BRANCH devel ****\n\n"

git checkout devel

# modify a file and add a new one

echo another line >> file1
echo file3 >> file3

git add file1 file3

echo -e "\n\n************    DIFFING\n\n"
git diff

echo -e "\n\n************    RECOMITTING\n\n"

# now get it all in with another commit

git commit . -m "This is a commit in the devel branch"
```

```
#  list files

echo -e "\n\nlist files, then git ls-files\n\n"

ls -l
git ls-files

# now checkout the original branch

echo -e "\n\n************ LIST BRANCHES AND CHECKOUT main **\n\n"

git branch
git checkout main

#  list files

echo -e "\n\n***************** list files, then git ls-files\n\n"

ls -l
git ls-files

echo -e "\n\n***************** SHOW THE BRANCH\n\n"

git branch

# diff the branches

echo -e "\n\n***************** DIFFING THE BRANCHES ****\n\n"

git diff main devel

# get a log of the devel branch
echo -e "\n\n***************** git log on devel branch *** \n\n"

git checkout devel
git log

# make a new change to main branch
echo -e "\n\n***************** Make a new change to main branch and commit\n\n"
git checkout main
echo something >> file4
git add file4
git commit -m"a new commit to the main branch"

# do the rebase

echo -e "\n\n***************** REBASING **********\n\n"

git rebase main devel

git branch
git ls-files
# diff the branches

echo -e "\n\n***************** DIFFING THE BRANCHES ****\n\n"

git diff main devel

# get a log of the devel branch
echo -e "\n\n***************** git log on devel branch *** \n\n"

git checkout devel
git log
```