

Version control: Answers

1. Create a directory in your svn repository.

Answer: For example:

```
export MYSVN=https://tyc-svn.cmth.ph.ic.ac.uk/users/your_username
svn mkdir $MYSVN/project_name
```

would create the directory `project_name` in your user account (svn requires you to provide a log message using an editor before making the commit). I have created the variable `MYSVN` to avoid retyping the full address.

2. Create and add files to your svn repository.

Answer: Following on from the above example:

```
svn checkout $MYSVN/project_name
cd project_name
echo hello world > hi
echo goodbye world > bye
svn add hi bye
svn commit -m "Add files to repository."
```

Note the use of the `-m` flag to provide the commit message on the command line rather than via a text editor.

3. Perform the following tasks (and any others you can think of):

- a. Make and commit changes.

Answer: Any changes will do followed by an *svn commit*. Example:

```
echo hello `whoami` >> hi
echo goodbye `whoami` >> bye
svn commit -m "Welcome and bid farewell to me as well."
```

- b. Make changes and inspect them using the diff command.

Answer: One change would be to delete a line in the files `hi` and `bye` using a text editor. Inspect your changes by running:

```
svn diff
```

- c. Revert your changes.

Answer: Use *svn revert*:

```
svn status # hi and bye files changed
svn revert *
svn status # no files changed
```

- d. Compare the current version to an earlier version.

Answer: *svn help diff* gives information about the `-r` flag.

```
svn diff -r 1
```

will compare your working copy to revision 1.

e. Inspect the commit log.

Answer:

```
svn log
```

4. Checkout your repository into another directory. Make a commit from this repository and update the first directory.

Answer:

```
cd
# checkout to a different directory.
svn checkout $MYSVN/project_name project_name_2ndcopy
cd project_name_2ndcopy
# edit file(s)
svn commit # enter log message
svn update
cd ~/project_name
svn update
```

5. [optional] In pairs: check out each other's repository. What happens if you both edit the same file in different places and then commit? What about if the edits are to the same part of the file? Find out how to resolve this.

Answer: See <http://svnbook.red-bean.com/en/1.4/svn.tour.cycle.html#svn.tour.cycle.resolve>.