

RCS

(Revision Control System)

# RCS

- The RCS system comprises a number of commands for managing source files.
- It works by tracking a source file as it's changed by maintaining a single file with a list of changes to recreate any previous version.
- It also allows you to store comments associated with every change.

## Contd...

- you can log each major change or bug fix you make to a source file separately and store comments against each change.
- As the RCS only saves the changes between versions, it's also very space efficient.
- The system also allows us to retrieve previous revisions in case of an accidental deletion.

# RCS commands

```
touch Test
```

```
rcs -i Test
```

```
nano Test
```

```
// write some content in the file
```

```
ci Test
```

```
// ci (check in) will make the first revision of the file
```

```
// Now to change the content
```

```
co -l Test
```

# RCS commands

nano Test

//modify the content

ci Test // This will create revision 1.2

In a similar fashion you can create n number of revision

To see all the revisions associated with the file you can use 'rlog' command

rlog Test

To see the difference between two revisions associated with the file you can use: rcsdiff command

rcsdiff -r1.1 -r1.2 Test

## Contd...

- The original file has been deleted, only version file exists (Exp: sum.sh,v)
- co: If we wish to change the file, we must first 'check out' the file.
- If we wish to edit it, we must lock the file with  
co -l filename

The reason for this is that, in a team project, it's important to ensure that only one person at a time is modifying a given file, which is why only one copy of a given version of a file has write permission. When a file is checked out with write permission, the RCS file becomes locked.

- **rlog:** It's often useful to look at a summary of changes to a file.

**Exp: `rlog important.c`**

- If we now want the first version of the file back, we can ask **co** for it by specifying the revision we require

**Exp: `co -r1.1 important.c`**

- **rcsdiff**: If we just want to know what was changed between two revisions, we can use the **rcsdiff** command

- **rcsdiff -r1.1 -r1.2 important.c**