

# Shell

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- When you log in, a shell program is automatically executed.
  - C-shell, Z-shell, ...
- A shell program runs your commands.
- A shell program has its own syntax.
  
- All the scripts I provide are written for Bash.
- Thus, if you see error messages like this,
  - export: Command not found.
- This is because you are not using Bash.
  
- In this case, you can run Bash after you log in, and then proceed.
  - bash

# Linux Environments

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- A shell has an environment setting file.
- The file is automatically loaded when the shell is executed (including the time you log in)
- For Bash, the filename is “.bashrc”.

# If an old version of Virtuoso is executed

- It will be because your environment setting has some conflicts.
- I recommend the following solutions for that.
  - If you don't need to use any other tools (e.g., you don't use any software in the other classes you take)
    - Back up your .bashrc file (in the home directory, run “cp .bashrc bashrc\_bk”).
    - Edit the “.bashrc” file as follows:

```
# .bashrc
if [ -f /etc/bashrc ]; then
    . /etc/bashrc
fi
PS1='$(pwd)\$ '
```
    - Now, log out. Next time, just log in and source the files I provide.
  - If you need to use some other tools, the easiest solution will be having two bashrc files.
    - Copy the current .bashrc file (in the home directory, run “cp .bashrc bashrc1”).
    - Make a new file. For example, name it “bashrc2”. Enter the above contents.
    - Now, if you want to use the software for EE434/466, log in, run “cp bashrc2 .bashrc”, log out, and log in.
    - If you want to use the software for the other classes, log in, run “cp bashrc1 .bashrc”, log out, and log in.