**CS3377.0W1 Week 6 Lab 2**

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**(Documentation with Terminal Log)**

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│ • MobaXterm 20.2 • │

│ (SSH client, X-server and networking tools) │

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│ → SSH session to dtp180003@cslinux1.utdallas.edu │

│ • SSH compression : v │

│ • SSH-browser : v │

│ • X11-forwarding : v (remote display is forwarded through SSH) │

│ • DISPLAY : v (automatically set on remote server) │

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│ → For more info, ctrl+click on help or visit our website │

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1. **Create apue01 directory**

{cslinux1:~/cs3377} mkdir apue01

{cslinux1:~/cs3377} cd apue01/

1. **Copy chapter 1 sample programs to this directory**

{cslinux1:~/cs3377/apue01} cp "/home/013/d/dt/dtp180003/cs3377/apue.3e/figlinks/fig1.10" fig1.10.c

{cslinux1:~/cs3377/apue01} cp "/home/013/d/dt/dtp180003/cs3377/apue.3e/figlinks/fig1.3" fig1.3.c

{cslinux1:~/cs3377/apue01} cp "/home/013/d/dt/dtp180003/cs3377/apue.3e/figlinks/fig1.4" fig1.4.c

{cslinux1:~/cs3377/apue01} cp "/home/013/d/dt/dtp180003/cs3377/apue.3e/figlinks/fig1.5" fig1.5.c

{cslinux1:~/cs3377/apue01} cp "/home/013/d/dt/dtp180003/cs3377/apue.3e/figlinks/fig1.6" fig1.6.c

{cslinux1:~/cs3377/apue01} cp "/home/013/d/dt/dtp180003/cs3377/apue.3e/figlinks/fig1.7" fig1.7.c

{cslinux1:~/cs3377/apue01} cp

"/home/013/d/dt/dtp180003/cs3377/apue.3e/figlinks/fig1.9" fig1.9.c

{cslinux1:~/cs3377/apue01} cp "/home/013/d/dt/dtp180003/cs3377/apue.3e/figlinks/fig1.8" fig1.8.c

{cslinux1:~/cs3377/apue01} ls

fig1.10.c fig1.3.c fig1.4.c fig1.5.c fig1.6.c fig1.7.c fig1.8.c fig1.9.c

1. **Compile all chapter 1 sample programs to fig1.x.exe**

{cslinux1:~/cs3377/apue01} gcc fig1.3.c -o fig1.3.exe -I ~/cs3377/apue.3e/include/ -L ~/cs3377/apue.3e/lib/ -lapue

{cslinux1:~/cs3377/apue01} gcc fig1.4.c -o fig1.4.exe -I ~/cs3377/apue.3e/include/ -L ~/cs3377/apue.3e/lib/ -lapue

{cslinux1:~/cs3377/apue01} gcc fig1.5.c -o fig1.5.exe -I ~/cs3377/apue.3e/include/ -L ~/cs3377/apue.3e/lib/ -lapue

{cslinux1:~/cs3377/apue01} gcc fig1.6.c -o fig1.6.exe -I ~/cs3377/apue.3e/include/ -L ~/cs3377/apue.3e/lib/ -lapue

{cslinux1:~/cs3377/apue01} gcc fig1.7.c -o fig1.7.exe -I ~/cs3377/apue.3e/include/ -L ~/cs3377/apue.3e/lib/ -lapue

{cslinux1:~/cs3377/apue01} gcc fig1.8.c -o fig1.8.exe -I ~/cs3377/apue.3e/include/ -L ~/cs3377/apue.3e/lib/ -lapue

{cslinux1:~/cs3377/apue01} gcc fig1.9.c -o fig1.9.exe -I ~/cs3377/apue.3e/include/ -L ~/cs3377/apue.3e/lib/ -lapue

{cslinux1:~/cs3377/apue01} gcc fig1.10.c -o fig1.10.exe -I ~/cs3377/apue.3e/include/ -L ~/cs3377/apue.3e/lib/ -lapue

{cslinux1:~/cs3377/apue01} ls

fig1.10.c fig1.3.c fig1.4.c fig1.5.c fig1.6.c fig1.7.c fig1.8.c fig1.9.c

fig1.10.exe fig1.3.exe fig1.4.exe fig1.5.exe fig1.6.exe fig1.7.exe fig1.8.exe fig1.9.exe

1. **Run fig1.3 (basically ls) on current directory**

{cslinux1:~/cs3377/apue01} ./fig1.3.exe ./

.

..

fig1.10.exe

fig1.7.c

fig1.6.c

fig1.10.c

fig1.4.exe

fig1.9.exe

fig1.3.c

fig1.8.c

fig1.9.c

fig1.4.c

fig1.6.exe

fig1.3.exe

fig1.5.c

fig1.7.exe

fig1.5.exe

fig1.8.exe

1. **Use fig1.4 to write standard input to standard output (in this case write terminal to file named output.txt)**

{cslinux1:~/cs3377/apue01} ./fig1.4.exe > output.txt

hello this is my 1.4 test

^C

{cslinux1:~/cs3377/apue01} cat output.txt

hello this is my 1.4 test

1. **Use fig1.5 to copy output.txt from fig1.4 to a new file named output2.txt**

{cslinux1:~/cs3377/apue01} ./fig1.5.exe < output.txt > output2.txt

{cslinux1:~/cs3377/apue01} cat output2.txt

hello this is my 1.4 test

1. **Execute fig1.6 (hello world + process ID)**

{cslinux1:~/cs3377/apue01} ./fig1.6.exe

hello world from process ID 31512

1. **Execute fig1.7 (which is basically a shell) run ls to check that it works then exit**

{cslinux1:~/cs3377/apue01} ./fig1.7.exe

% ls

fig1.10.c fig1.3.c fig1.4.c fig1.5.c fig1.6.c fig1.7.c fig1.8.c fig1.9.c output2.txt

fig1.10.exe fig1.3.exe fig1.4.exe fig1.5.exe fig1.6.exe fig1.7.exe fig1.8.exe fig1.9.exe output.txt

% ^C

1. **Execute fig1.8 (basically writes out errors for you)**

{cslinux1:~/cs3377/apue01} ./fig1.8.exe

EACCES: Permission denied

./fig1.8.exe: No such file or directory

1. **Execute fig1.9 (print user ID and group ID)**

{cslinux1:~/cs3377/apue01} ./fig1.9.exe

uid = 633083, gid = 215

1. **Execute fig1.10 (also a shell like 1.7, but it gives an interrupt message when finished)**

{cslinux1:~/cs3377/apue01} ./fig1.10.exe

% ls

fig1.10.c fig1.3.c fig1.4.c fig1.5.c fig1.6.c fig1.7.c fig1.8.c fig1.9.c output2.txt

fig1.10.exe fig1.3.exe fig1.4.exe fig1.5.exe fig1.6.exe fig1.7.exe fig1.8.exe fig1.9.exe output.txt

% ^Cinterrupt