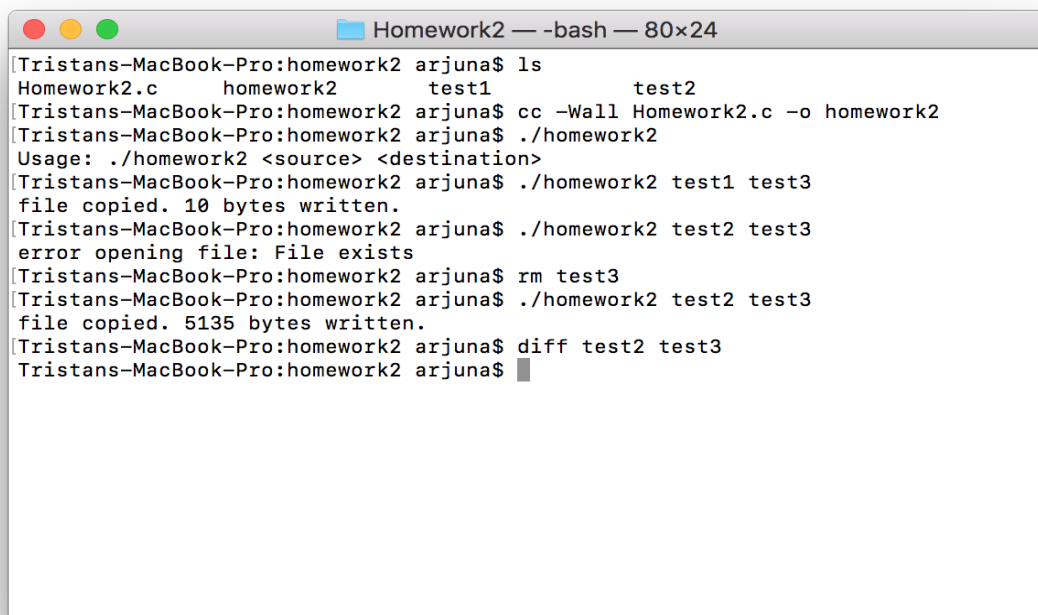


Homework 2

Overview: This program serves to copy a file, similar to the CP command in UNIX. It takes in 2 command line arguments, the source and the destination, copying the contents of the source file into a new one at the destination. This will not overwrite an existing file, and giving one as the destination argument will result in an error. The program works by looping through the source file, copying 1024 into an intermediary buffer and writing the contents into the destination. Errors are reported to stderr.

Testing: For testing I copied files both larger and smaller than the buffer size of 1024 bytes. The diff unix utility was used to compare the contents of the file. Error messages were checked in cases where applicable, such as wrong number of arguments, destination file already existing, or read/write failure.



```
Homework2 — -bash — 80x24
[Tristans-MacBook-Pro:homework2 arjuna$ ls
Homework2.c      homework2      test1          test2
[Tristans-MacBook-Pro:homework2 arjuna$ cc -Wall Homework2.c -o homework2
[Tristans-MacBook-Pro:homework2 arjuna$ ./homework2
Usage: ./homework2 <source> <destination>
[Tristans-MacBook-Pro:homework2 arjuna$ ./homework2 test1 test3
file copied. 10 bytes written.
[Tristans-MacBook-Pro:homework2 arjuna$ ./homework2 test2 test3
error opening file: File exists
[Tristans-MacBook-Pro:homework2 arjuna$ rm test3
[Tristans-MacBook-Pro:homework2 arjuna$ ./homework2 test2 test3
file copied. 5135 bytes written.
[Tristans-MacBook-Pro:homework2 arjuna$ diff test2 test3
[Tristans-MacBook-Pro:homework2 arjuna$
```