

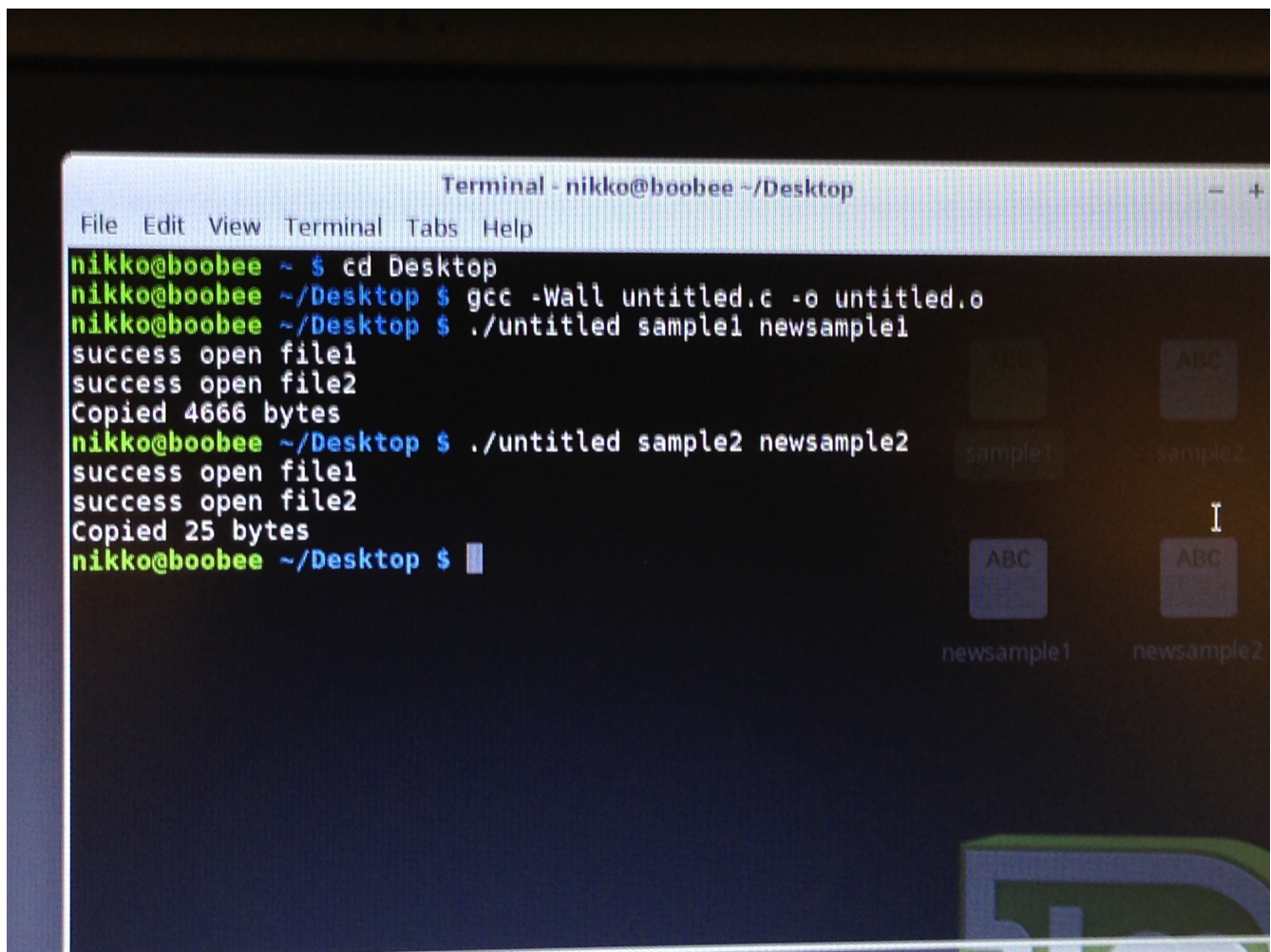
Homework 2

Overview

This assignment is a simple copy program that mocks the same command on Unix machines, such as the `cp file1 file2` command. I am using a buffer that holds 1024 bytes. My program uses the low level file I/o api on linux. It loops through the file specified in argument one, and writes to the file in argument two through each loop, until the bytes returned from read equal zero. When done, it outputs the number of bytes copied, and closes both files. In case of error, they are all handled by stderr. `O_EXCL` mode in the open function makes sure no existing files are overwritten.

Testing

For testing, I copied two text files, one less than 1KB, and another file bigger than 1KB, which was around 4KB.



```
Terminal - nikko@boobee ~/Desktop
File Edit View Terminal Tabs Help
nikko@boobee ~ $ cd Desktop
nikko@boobee ~/Desktop $ gcc -Wall untitled.c -o untitled.o
nikko@boobee ~/Desktop $ ./untitled sample1 newsample1
success open file1
success open file2
Copied 4666 bytes
nikko@boobee ~/Desktop $ ./untitled sample2 newsample2
success open file1
success open file2
Copied 25 bytes
nikko@boobee ~/Desktop $
```

The screenshot shows a terminal window titled "Terminal - nikko@boobee ~/Desktop". The user navigates to the Desktop directory and compiles a C program named "untitled.c" into "untitled.o" using gcc. They then run the program twice: first copying "sample1" to "newsample1" (4666 bytes) and then "sample2" to "newsample2" (25 bytes). The program outputs "success open file1", "success open file2", and "Copied [bytes] bytes" for each run. In the background, a desktop environment is visible with icons for "sample1", "sample2", "newsample1", and "newsample2", each containing the text "ABC".