

1) Copyout() copies a block of memory of size LEN bytes from the kernel space address SRC to the user space address USERDEST.

2) The reason why we want to vfs\_close() is because we want to ensure that while in the user space, processes do not have the ability to modify any files the kernel was working on. If a file was modified, then when we revert back to kernel mode, the kernel will be dealing with a different file which we are trying to avoid.

3) p testbin/argtest 5 4 3

4) Userptr\_t is a pointer to a one-byte struct, so it won't mix with other pointers.

5) We must change kill\_curthread() because all it does right now is print out an error statement. We need to implement handling the exception so we can kill the process.

6) OFF for kill\_curthread, ON for syscall

7) Copyin() copies a block of memory with length LEN from user-level address USERSRC to the kernel address DEST. Copyinstr copies a string from user-level address USERSRC to kernel address DEST. Copyinstr utilizes a function called copystr which just copies a null-terminated string from SRC to DEST.

8) Vop\_open() is used to open a file or device and obtain a vnode.

9) Some operations you can do on vnode include: vop\_open, vop\_close, vop\_reclaim, vop\_read, vop\_write, etc. No, we do not need to create two vnodes.