

**The Block I/O Layer - A**

***Objective: In this lab you explore the Block I/O Layer scheduler called NOOP (no operation) by examining its implementation source files.***

1. Load into an editor (gedit) the implementation file of the noop I/O scheduler located in block/noop-iosched.c under the /Student/src/CentOS/BUILD/kernel folder.
2. Note the user of an “elevator” structure. Load into an editor (gedit) the include for elevator.h located under /include/linux/elevator.h and the implementation file located under /block/elevator.c

***Answer the questions below.***

* What function does the NOOP scheduler use to “install” itself within the kernel as a block I/O scheduler?
* What function “uninstalls” the NOOP block I/O scheduler?
* What kernel data structure is used by NOOP to manage the I/O requests?
* What is the role of function noop\_merged\_requests() ?
* Which hardware device would NOOP perform well on given that there is no seek penalty? Would it outperform the other I/O schedulers? Explain.