

README for Assignment 1

Advances in Operating Systems Design (CS60038)

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Steps to load the module and run the test files

1. To compile the module, run

```
make
```

2. To load the lkm, run

```
make load
```

3. To unload the lkm, run

```
make unload
```

4. To compile and run the test files, run

```
make test_<test_no.>
```

where test nos. are 1, 2 and 3

5. To clean the object files generated, run

```
make clean
```

6. To clean the executable file of the test files, run

```
make clean_test
```

Description of test files

Test 1: This test file tests if a process can put data into the lkm and read the same. Additionally, it also tests whether a process which has already opened the proc file can open the same again before closing the previous one.

Test 2: In this test file, the user has to give the maximum capacity of the deque and enter the numbers. This gives us the chance to test whether the lkm throws error or not in case of invalid size of the deque (eg: -5, 0, 101 etc.)

Test 3: This test file checks if the lkm throws error incase the deque is full (during write) or empty (during read). In the test file, the size of the deque is 6 but we try to put 7 elements and read the 7 elements.

Additionally, we also check the concurrency by running two or more test files together.