

Lab 7.1

Compile, install and test the **hello-5** driver.

Write a report that lists the steps that you followed, and that indicates where you find the outputs.

Lab 7.2

Compile the **chardev_SDP_lab** driver.

Compile the program **test_chardev.c**

This can be done as a user

As superuser install **chardev_SDP_lab** driver.

After you have installed the module, look at the tail of the file `/var/log/kern.log`, or use the command `dmesg | tail`.

The output will suggest you how to create the special file `/dev/chardev_SDP_lab`

Execute as superuser `test_chardev /dev/chardev_SDP_lab`

Verify whether it works correctly or not.

Give the command `echo something > /dev/chardev_SDP_lab`

Try `cat /dev/chardev_SDP_lab`

what is its output?

Why `test_chardev /dev/chardev_SDP_lab` gives the correct results, whereas `cat` does not behave as expected?

Correct your device driver to produce the expected results using both `test_chardev` and `cat`. In particular, verify that executing in sequence the commands:

```
echo something > /dev/chardev_SDP_lab
cat /dev/chardev_SDP_lab
echo xxx > /dev/chardev_SDP_lab
cat /dev/chardev_SDP_lab
```

you get the strings **something** and **xxx**, respectively, nothing else.

Hints:

- Use `printk` to follow the control and data flow, this should allow you to figure out what is the difference between `test_chardev` and `cat` and to change your driver code.

Post your code, a description of your solution, and examples of usage of your driver.