E02

For the `chardev_SDP_lab` module, the steps for compiling and installing the module on the system are analogue to the ones taken for the `hello-5` module. The only difference is that we have to create a special file to represent this character device.

During the installation, if we look at `/var/log/messages`, we are given a hint to the command we have to type in for creating the character device. The command is `mknod /dev/chardev_SDP_lab c 251 0`.

Now we have to compile the test program, using for example `gcc -g test_chardev.c -o test_chardev`. If we run the test program (`./test_chardev /dev/chardev_SDP_lab`) we can see that the device is working properly. Instead, if we use some standard commands like `echo` and `cat`, we can see that this solution does not work.

We have to fix something in the `device_read()` function of the module. The problem is that the device reads all the buffer independently from the length of the string that the buffer stores. Hence, in our solution we simply compute the length of the string using `strlen()` and use that value. We also reset the buffer to `0` at the end of every read.