

## Part 3 Implementation details

File: mod\_s2fs/s2fs.c in s2fs\_part3.tar.gz. File is common for all the following subparts.

### 3.1

s2fs\_make\_inode function: Lines 15-26

Assignment of i\_ino pointer to get\_next\_ino(): Line 23

### 3.2

s2fs\_create\_dir function: Lines 112-139

### 3.3

s2fs\_file\_ops definition: Line 77

### 3.4

s2fs\_create\_file function: Line 83

### 3.5

Included s2fs\_part3.tar.gz tar file.

### 3.6

Following is a screenshot of the results of all the required commands.

```
[root@vl59:/home/student/oskernel/linux-4.18/mod_s2fs# sudo insmod s2fs.ko
[root@vl59:/home/student/oskernel/linux-4.18/mod_s2fs# sudo mount -t s2fs nodev mnt
[root@vl59:/home/student/oskernel/linux-4.18/mod_s2fs# cd mnt/foo
[root@vl59:/home/student/oskernel/linux-4.18/mod_s2fs/mnt/foo# cat bar
Hello World!
[root@vl59:/home/student/oskernel/linux-4.18/mod_s2fs/mnt/foo# cd ../../
[root@vl59:/home/student/oskernel/linux-4.18/mod_s2fs# sudo umount ./mnt
[root@vl59:/home/student/oskernel/linux-4.18/mod_s2fs# sudo rmmod s2fs.ko
root@vl59:/home/student/oskernel/linux-4.18/mod_s2fs#
```