Important points for presentation stuff:

Ex. 1.

What does it do? Prints “Loading Kernel Module” and the Golden ratio prime on the kernel log when It loads. Prints “Removing Module” and the gcd between 3300 and 24 on the kernel log when It removes It.

Commands:

List all modules currently loaded:

```
lsmod
```

Load the Kernel Module:

```
sudo insmod simple.ko
```

Check Kernel Log messages:

```
dmesg
```

Remove kernel module:

```
sudo rmmod simple
```

Clean Kernel buffer:

```
sudo dmesg -c
```

Ex. 2.

What does It do? Simple shell that executes given commands and also stores them in a history array.

The command parsing is like this:

<command> <params> <optional & in case the user wants to run this in the background>

Gets stored inside an array “args” like so: args[0] = “command”, args[1 till len(args)]= ”params” and then a function execvp gets called. And It looks like this:

execvp(char *command, char *params[])

Also each executed command gets stored inside a history array and the user can call the last command by using “!!”. If the history array is empty the console prompts “No commands in history” and exits.

Commands:

ls -l : Command “ls” list files, param “-l” use long listing format

less: Read command output one page at a time.

cat: Reads files sequentially.

sort: Arranges records in a particular order.

ps -ael: Displays information about a selection of the active processes. Params “-ael”, “a” all processes even those not associated with the terminal. “e” Select all processes. “l” Long format.

Ex 3.

What does It do? A kernel module that lists all the current processes using the for_each_process linux kernel function.

Commands:

ps -el: report a snapshot of the current processes. -e select all processes -l long format.