# Homework M5: System Startup and Processes Management

For a successful completion of the tasks it is enough use just one machine. In our case this could be for example the server (**Jupiter**) or any of the other two (either **Mars** or **Venus**) or why not a new one.

Let’s assume that the following list of tasks will be performed **Jupiter** (**server**) host:

1. Make the following permanent changes in the boot procedure of your system of choice:
   1. Set waiting time to be **1 minute**
   2. Instruct the loader to show **all diagnostic** messages during boot
   3. **Publish** the changes
2. After the boot, save the contents of the kernel **ring** **buffer** in **human** readable format **ordered** from the **latest** to the **earliest** to a file named **boot\_extract.txt**
3. Show in a **graphical** way the **initialization** duration and **order** of the startup processes. Store the result in a file **init\_duration.svg**
4. Create a **tree** of **all** **processes** on your system with their **PIDs** and store it to a file **processes.txt**
5. Check **how much** space are consuming the folders in the **/** but focus only on the **first** level. Extract the data in **human** readable format **ordered** from the **largest** to the **smallest** consumer and save it to file **space.txt**
6. Demonstrate the usage of one of the following commands – **kill**, **killall**, and **pkill**. Save the output as **kill\_output.txt**
7. Demonstrate the usage of one of the following commands – **vmstat**, **pidstat**, and **iostat**. Save the result in file named **stat\_output.txt**
8. Save the list of open files in your **/etc** folder to a file **open\_files.txt**
9. Collect **5 measurements** with a pause of **5 seconds** between two iterations of all running processes on the system and save them to a file **process\_monitoring.txt**

## Proof

Upload a document (txt, doc, docx, pdf) containing the commands that you executed in order to accomplish the above tasks.