1) list all files larger than 1MB in current directory and save output to a file

```
arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment2$ ls -lh
total 5.1M
-rw-rw-r-- 1 arjjun-g arjjun-g 2.0M Jan 31 13:37 bigfile1.bin
-rw-rw-r-- 1 arjjun-g arjjun-g 3.0M Jan 31 13:38 bigfile2.bin
-rw-rw-r-- 1 arjjun-g arjjun-g  105 Jan 31 13:33 config.txt
-rw-rw-r-- 1 arjjun-g arjjun-g  731 Jan 31 13:34 log.txt
-rw-rw-r-- 1 arjjun-g arjjun-g    0 Jan 31 13:38 smallfile.txt
arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment2$
```

```
arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment2$ find . -maxdepth 1 -typ
e f -size +1M > large_files.txt
arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment2$ cat large_files.txt
./bigfile1.bin
./bigfile2.bin
arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment2$
```

2) replace all occurrences of "`localhost`" with "`127.0.0.1`" in `config.txt` and save as `updated_config.txt`

```
  GNU nano 7.2                          config.txt *
server_name=localhost
database_host=localhost
api_url=http://localhost:8080/api
backup_server=localhost
```

```
arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment2$ sed 's/localhost/127.0.
0.1/g' config.txt > updated_config.txt
arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment2$ cat updated_config.txt
server_name=127.0.0.1
database_host=127.0.0.1
api_url=http://127.0.0.1:8080/api
backup_server=127.0.0.1

arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment2$
```

3) search log lines containing "ERROR" but exclude lines containing "DEBUG", save to
filtered_log.txt

```
arjjun-g@arjjun-g-VMware-Virtual-Platform: ~/assignment2

arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment2$ nano log.txt
arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment2$ cat log.txt
DEBUG: Starting the application initialization.
ERROR: Unable to connect to the database.
INFO: User 'admin' logged in successfully.
DEBUG: Fetching configuration settings from the server.
ERROR: DEBUG - Configuration settings could not be applied.
INFO: Scheduled job 'backup' completed successfully.
DEBUG: Connection to server timed out. Retrying...
ERROR: Failed to fetch data from API endpoint '/users'.
INFO: Maintenance mode activated.
ERROR: DEBUG - Query execution failed due to a syntax error.
DEBUG: Reloading application modules.
ERROR: Missing required parameter in the request.
INFO: Shutting down the system gracefully.
DEBUG: Closing unused network connections.
ERROR: DEBUG - Unexpected server response received.

arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment2$
```

```
arjjun-g@arjjun-g-VMware-Virtual-Platform: ~/assignment2

arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment2$ grep "ERROR" log.txt |
grep -v "DEBUG" > filtered_log.txt
arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment2$ cat filtered_log.txt
ERROR: Unable to connect to the database.
ERROR: Failed to fetch data from API endpoint '/users'.
ERROR: Missing required parameter in the request.
arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment2$
```

4) Identify the process with the highest memory usage and terminate it

```
arjjun-g@arjjun-g-VMware-Virtual-Platform: ~/assignment2

arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment2$ ps -eo pid,comm,%mem --
sort=-%mem | head -n 2
    PID COMMAND         %MEM
   4703 firefox         13.2
arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment2$
```

```
arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment2$ ps -eo pid,comm,%mem --
sort=-%mem | head -n 2

    PID COMMAND         %MEM
   4703 firefox         13.2
arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment2$ kill "$(ps -eo pid= --s
ort=-%mem | head -n 1)"

arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment2$ ps -eo pid,comm,%mem --
sort=-%mem | head -n 2
    PID COMMAND         %MEM
   2495 gnome-shell      6.9
arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment2$
```

5) use the networking tool to Print all available gateways in a **sorted** manner


```
arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment2$ ip route | grep default
 | sort

default via 192.168.249.2 dev ens33 proto dhcp src 192.168.249.128 metric 100
arjjun-g@arjjun-g-VMware-Virtual-Platform:~/assignment2$
```

This Assignment is done by Arjjun G