1) запустить контейнер с ubuntu, используя механизм LXC

sudo apt-get install lxc

```
max_ub_gb@VirtualBox:/sys/fs/cgroup$ sudo apt install lxc
[sudo] password for max_ub_gb:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  bridge-utils libfuse2 liblxc-common liblxc1 libpam-cgfs lxc-utils lxc
```

sudo apt install lxc-templates

```
max_ub_gb@VirtualBox:/sys/fs/cgroup$ sudo apt install lxc-templates
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  arch-test cloud-image-utils debootstrap fakechroot fakeroot ibverbs-pro
  libdistro-info-perl libdpkg-perl libfakechroot libfakeroot libfile-fcnt
  libafxdr0 libglusterfs0 libibverbs1 libiscsi7 libndctl6 libpmem1 libpm
```

sudo lxc-create –n test1 –t ubuntu

```
max_ub_gb@VirtualBox:/$ sudo lxc-create -n test1 -t ubuntu
[sudo] password for max_ub_gb:
Checking cache download in /var/cache/lxc/jammy/rootfs-amd64 ...
Installing packages in template: apt-transport-https,ssh,vim,language-pack-en
Downloading ubuntu jammy minimal ...

Current default time zone: 'Etc/UTC'
Local time is now:      Sun Apr  2 09:34:51 UTC 2023.
Universal Time is now:  Sun Apr  2 09:34:51 UTC 2023.


##
# The default user is 'ubuntu' with password 'ubuntu'!
# Use the 'sudo' command to run tasks as root in the container.
##

max_ub_gb@VirtualBox:/$ sudo lxc-ls -f
```

sudo lxc-start test1
sudo lxc-ls –f

```
max_ub_gb@VirtualBox:/$ sudo lxc-start test1
max_ub_gb@VirtualBox:/$ sudo lxc-ls -f
NAME   STATE   AUTOSTART GROUPS IPV4       IPV6 UNPRIVILEGED
test1 RUNNING 0          -      10.0.3.245 -    false
max_ub_gb@VirtualBox:/$
```

sudo lxc-attach test1

```
test1 RUNNING 0          -      10.0.3.245 -    false
max_ub_gb@VirtualBox:/$ sudo lxc-attach test1
root@test1:/#
root@test1:/#
root@test1:/#
```

2) ограничить контейнер 256 Мб ОЗУ и проверить, что ограничение работает

Было памяти
free -m

```
root@test1:/# free -m
              total        used        free      shared  buff/cache   available
Mem:           5181          26        5149           0           4        5154
Swap:             0           0           0
root@test1:/#
```

Запишем в файл lxc-конфиг (пишем снаружи)

Ограничим память
echo lxc.cgroup2.memory.max = 256M >> /var/lib/lxc/test123/config

Автозапуск
echo lxc.start.auto = 1 >> /var/lib/lxc/test123/config

Остановим и запустим по новой:

sudo lxc-stop test1

```
root@VirtualBox:/var/lib/lxc/test1# sudo lxc-stop test1
root@VirtualBox:/var/lib/lxc/test1# lxc-ls -f
NAME   STATE     AUTOSTART  GROUPS  IPV4  IPV6  UNPRIVILEGED
test1  STOPPED   1              -       -     -     false
root@VirtualBox:/var/lib/lxc/test1#
```