**4(a)**

docker run --name test -it debian

$ echo $?

13

$ docker ps -a | grep test

d6c0fe130dba        debian:7            "/bin/bash"         26 seconds ago      Exited (13) 17 seconds ago                         test

 (--cidfile)

$ docker run --cidfile /tmp/docker\_test.cid ubuntu echo "test"

Full container capabilities (--privileged)

$ docker run -t -i --rm ubuntu bash

root@bc338942ef20:/# mount -t tmpfs none /mnt

mount: permission denied

$ docker run -t -i --privileged ubuntu bash

root@50e3f57e16e6:/# mount -t tmpfs none /mnt

root@50e3f57e16e6:/# df -h

Filesystem      Size  Used Avail Use% Mounted on

none            1.9G     0  1.9G   0% /mnt

Set working directory (-w)

$ docker  run -w /path/to/dir/ -i -t  ubuntu pwd

The -w lets the command being executed inside directory given, here /path/to/dir/. If the

Set storage driver options per container

$ docker run -it --storage-opt size=120G fedora /bin/bash

Mount tmpfs (--tmpfs)

$ docker run -d --tmpfs /run:rw,noexec,nosuid,size=65536k my\_image

The --tmpfs flag mounts an empty tmpfs into the container with

Mount volume (-v, --read-only)

$ docker  run  -v `pwd`:`pwd` -w `pwd` -i -t  ubuntu pwd

$ docker run -v /doesnt/exist:/foo -w /foo -i -t ubuntu bash

$ docker run --read-only -v /icanwrite busybox touch /icanwrite/here

**4 (b)**

docker run --name test -it debian

$ echo $?

13

$ docker ps -a | grep test

$ docker run --cidfile /tmp/docker\_test.cid ubuntu echo "test"

$ docker run -t -i --rm ubuntu bash

 mount -t tmpfs none /mnt

$ docker run -t -i --privileged ubuntu bash

 mount -t tmpfs none /mnt

 df -h

$ docker  run -w /path/to/dir/ -i -t  ubuntu pwd

$ docker run -it --storage-opt size=120G fedora /bin/bash

$ docker run -d --tmpfs /run:rw,noexec,nosuid,size=65536k my\_image

$ docker  run  -v `pwd`:`pwd` -w `pwd` -i -t  ubuntu pwd

$ docker run -v /doesnt/exist:/foo -w /foo -i -t ubuntu bash

$ docker run --read-only -v /icanwrite busybox touch /icanwrite/here