

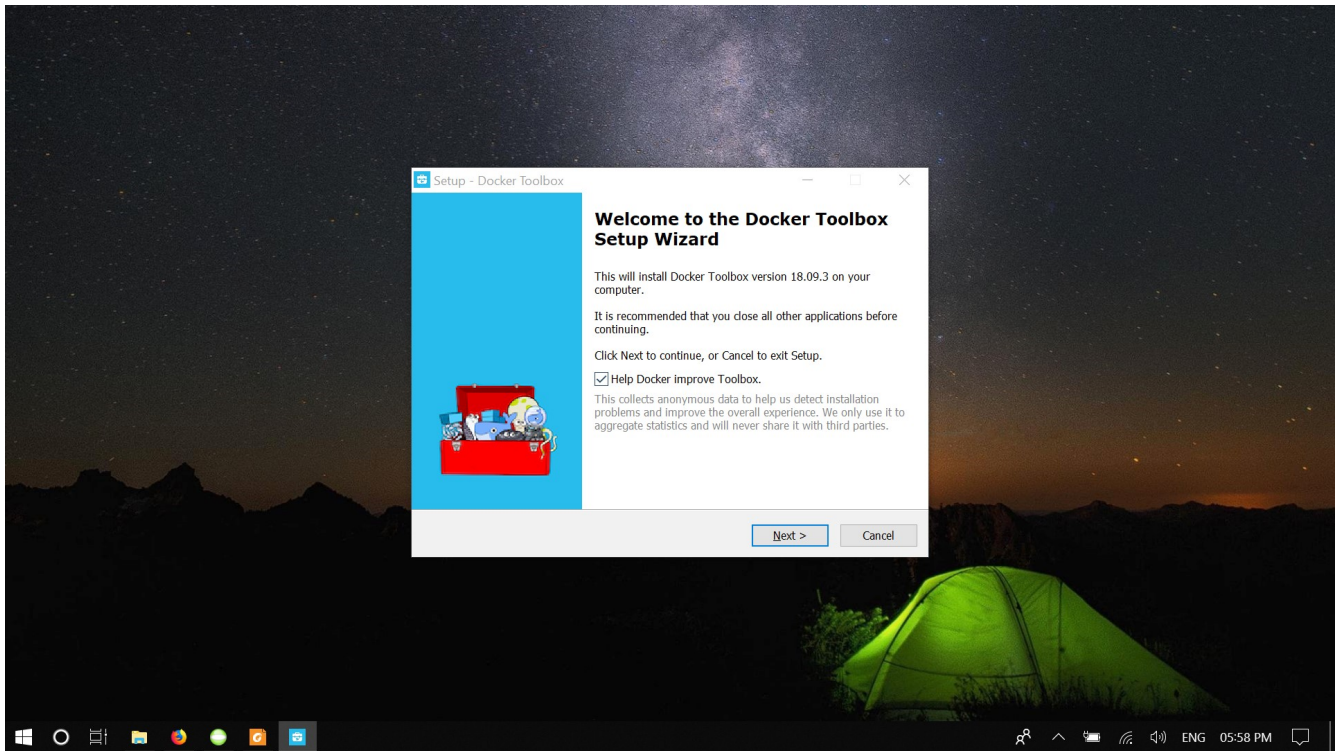
**EECS 3482**

**Lab 5**

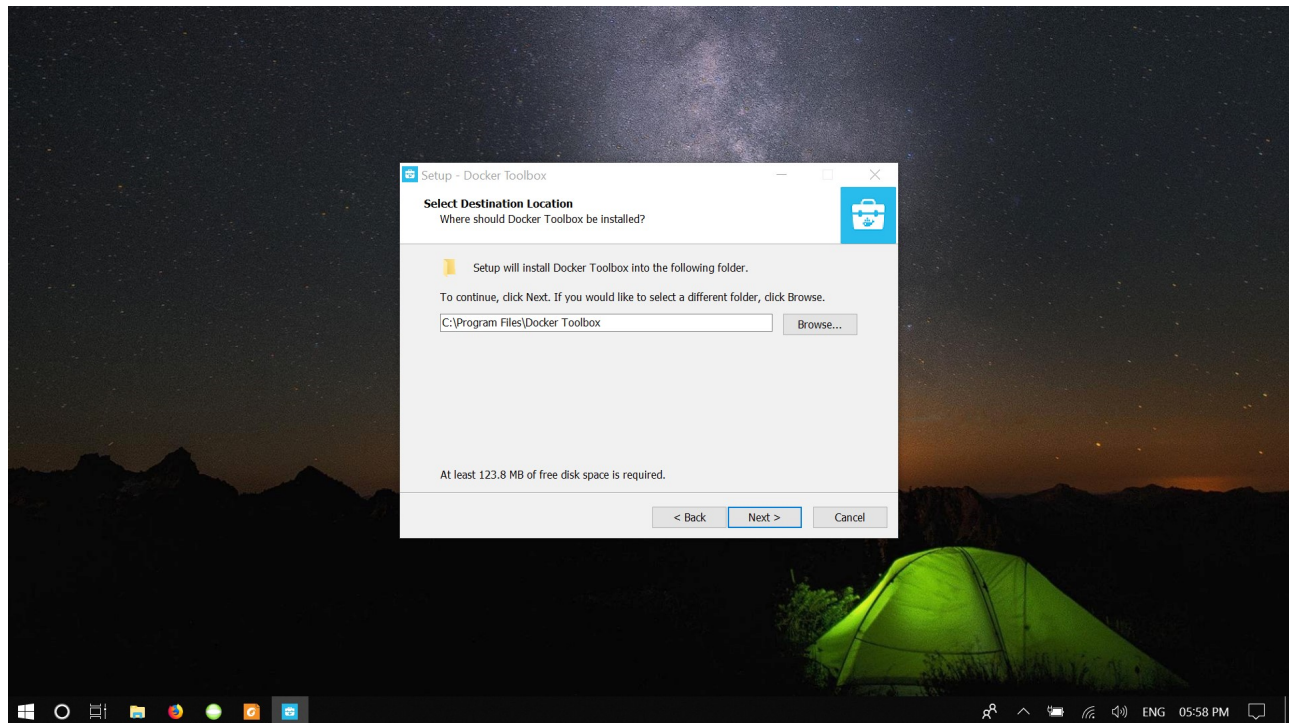
**Name : AKALPIT SHARMA**

**id : 212650628**

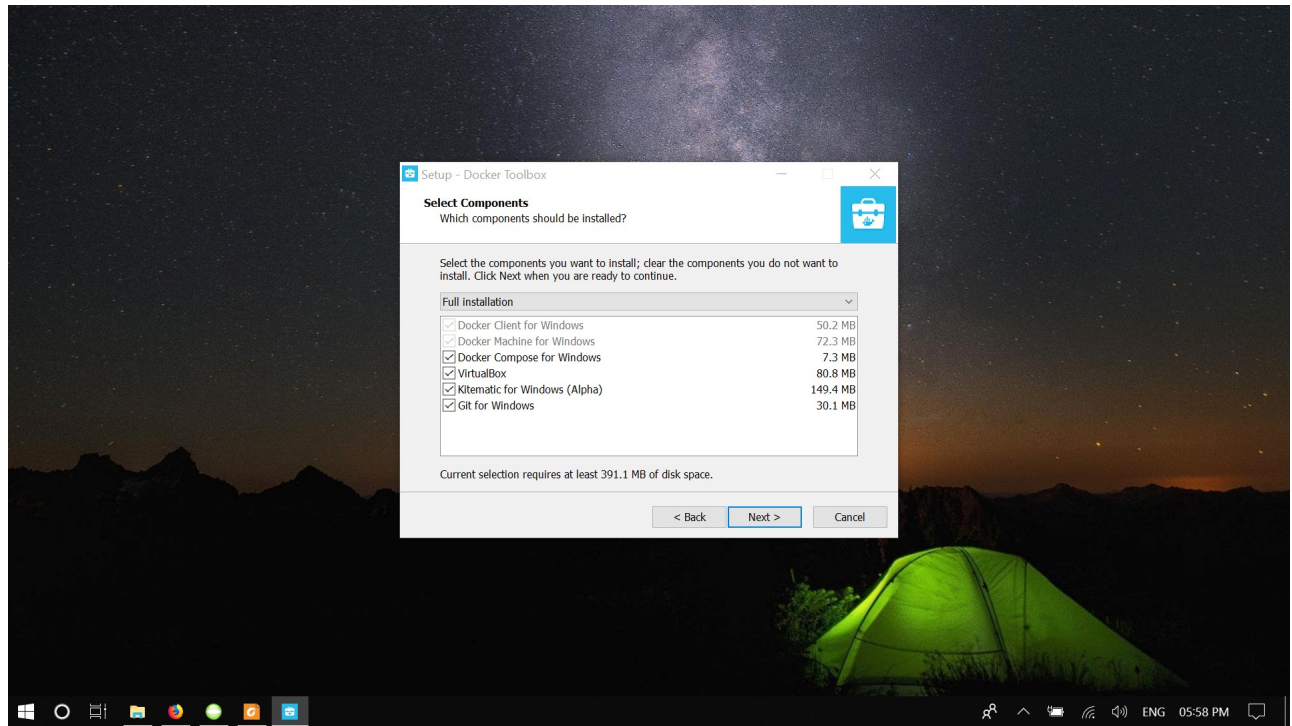
1.



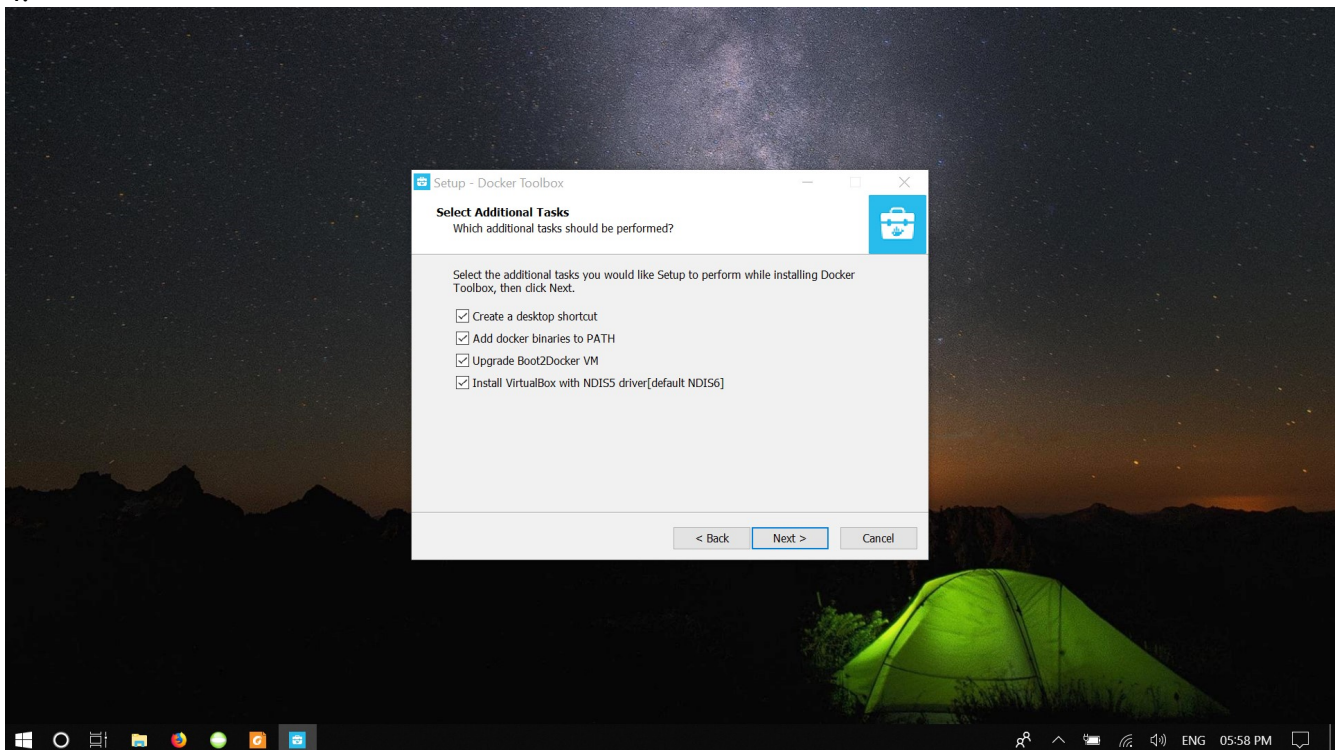
2.



3.

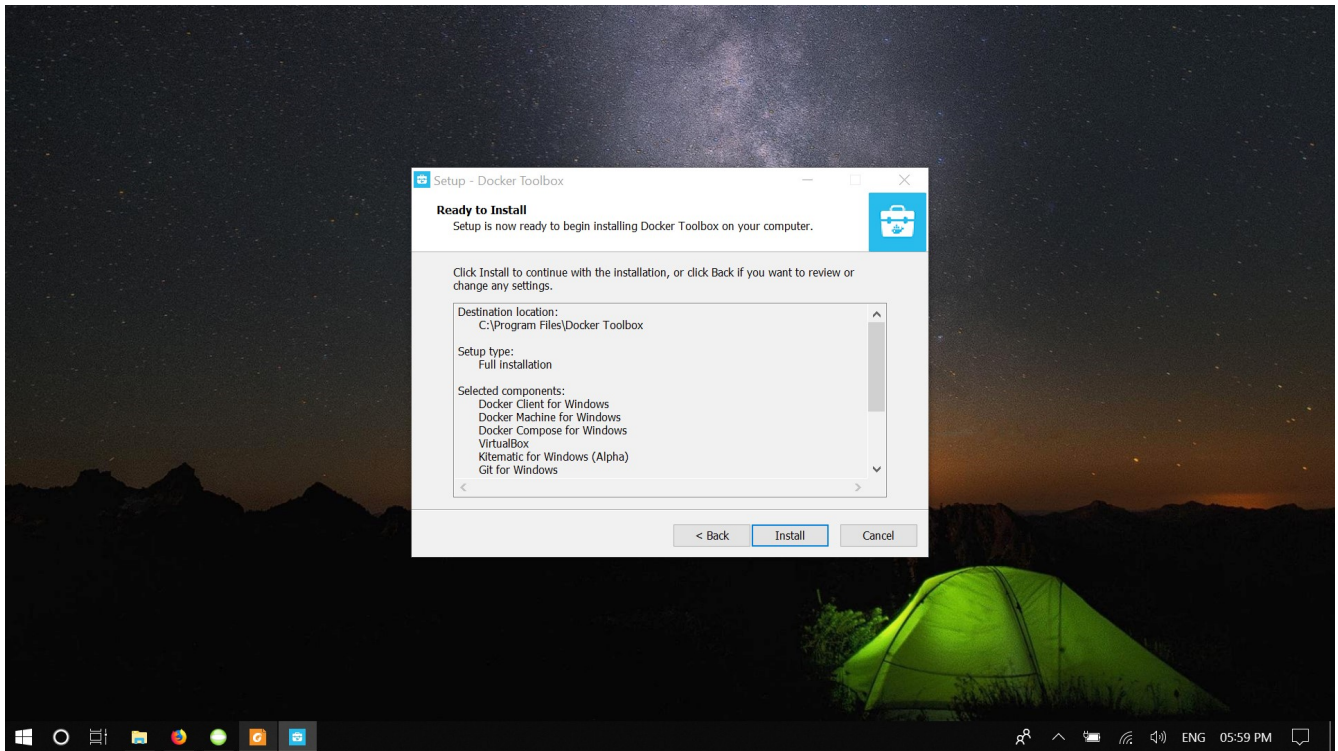


4.

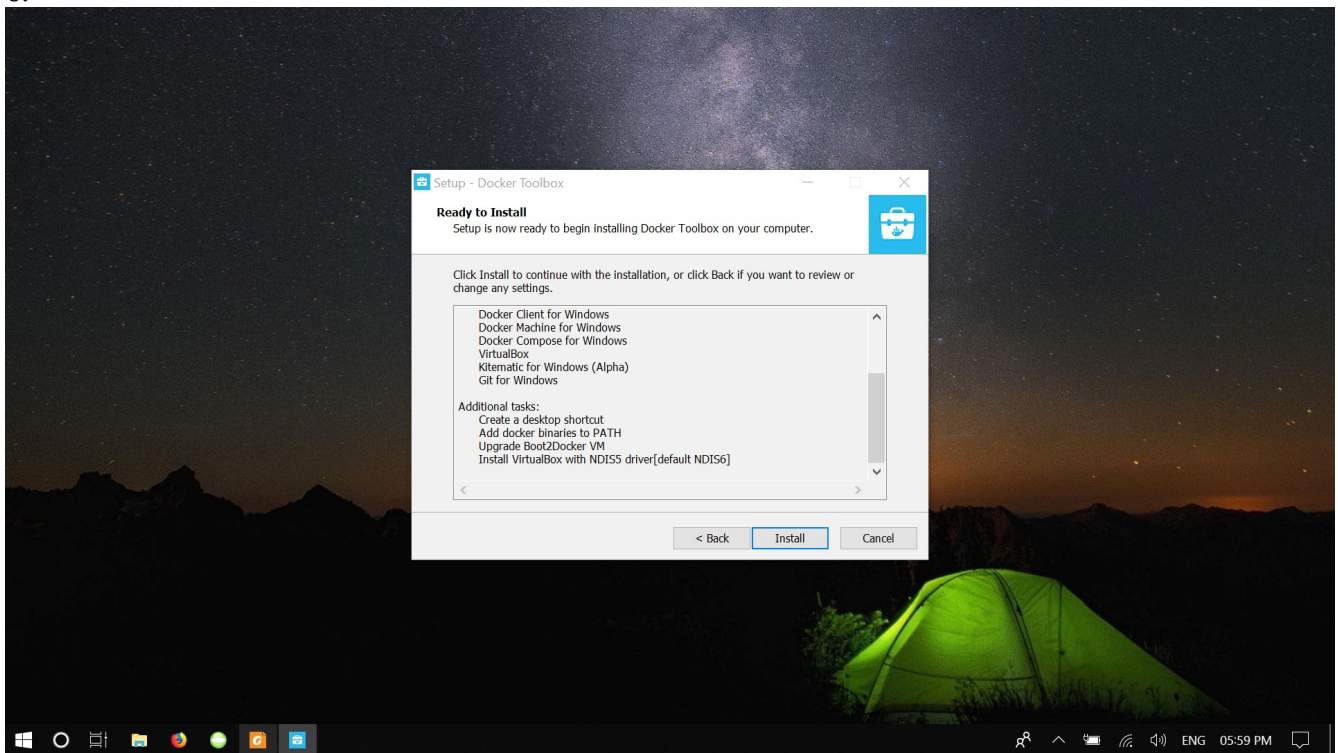




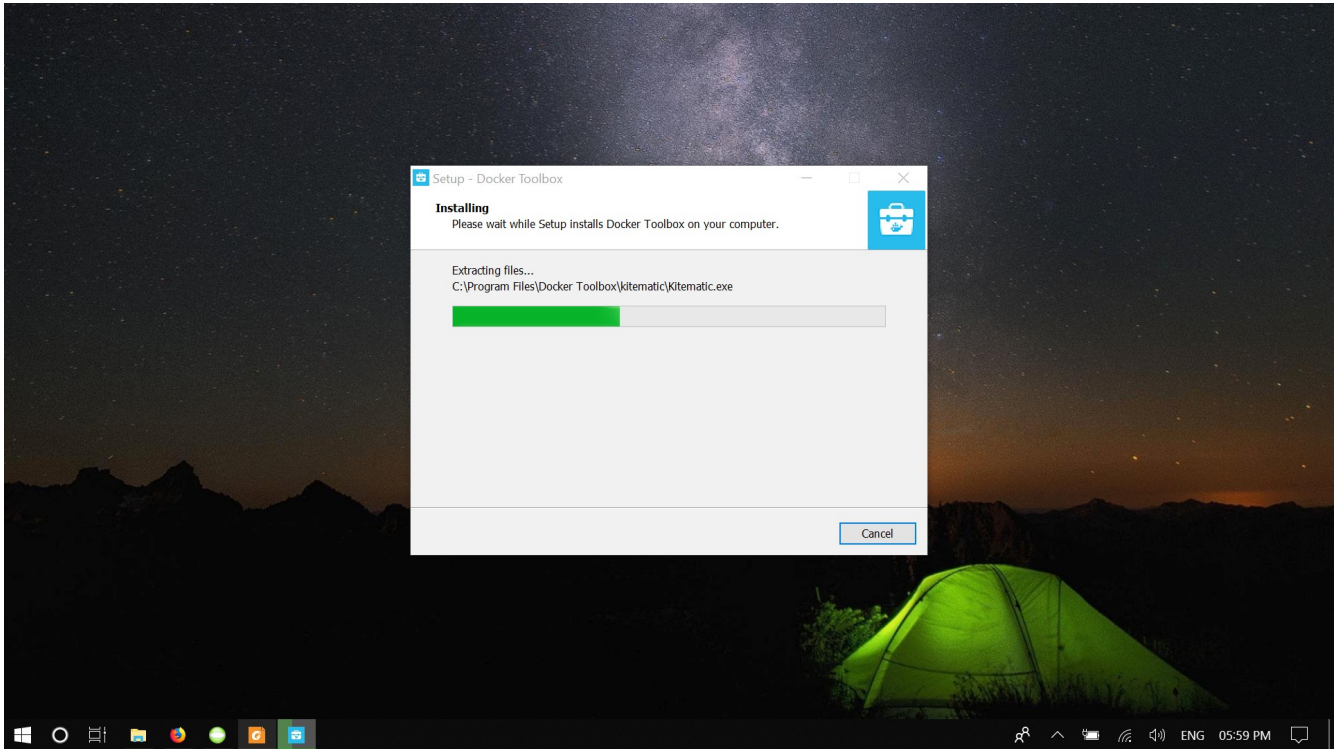
5.



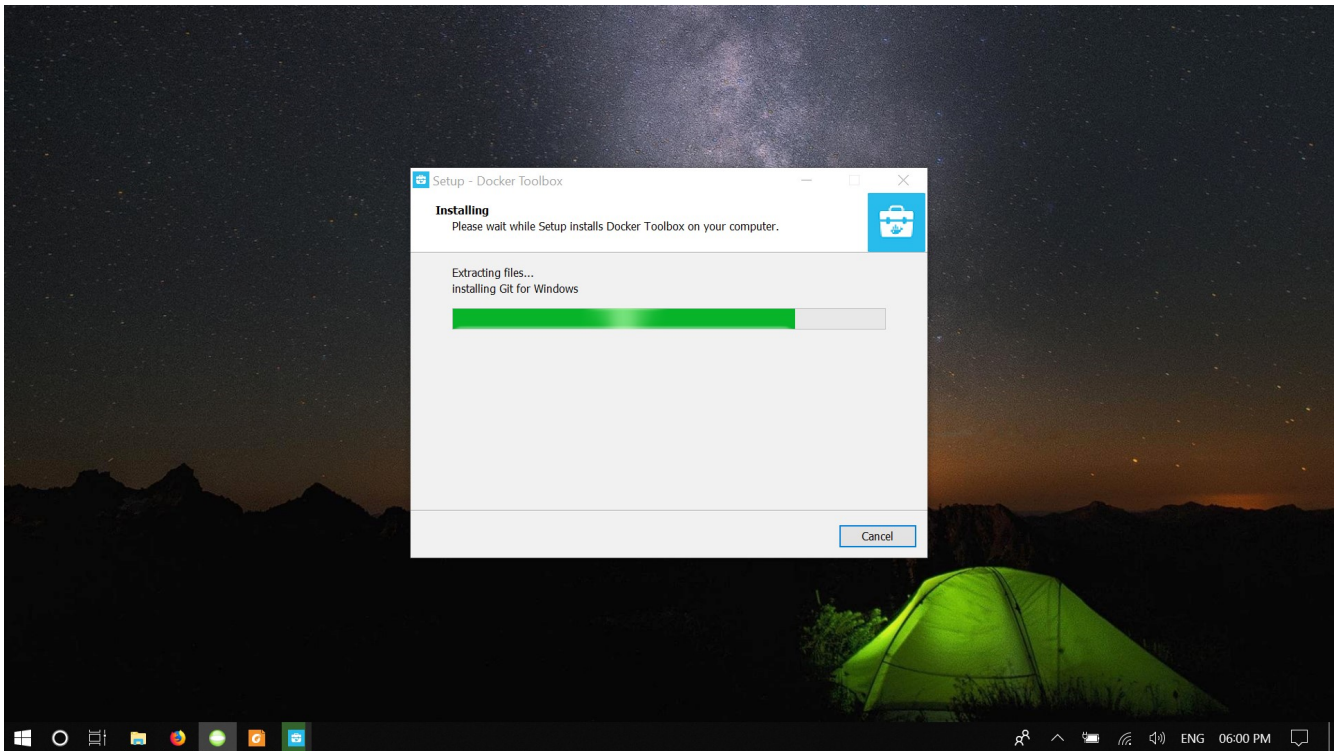
6.



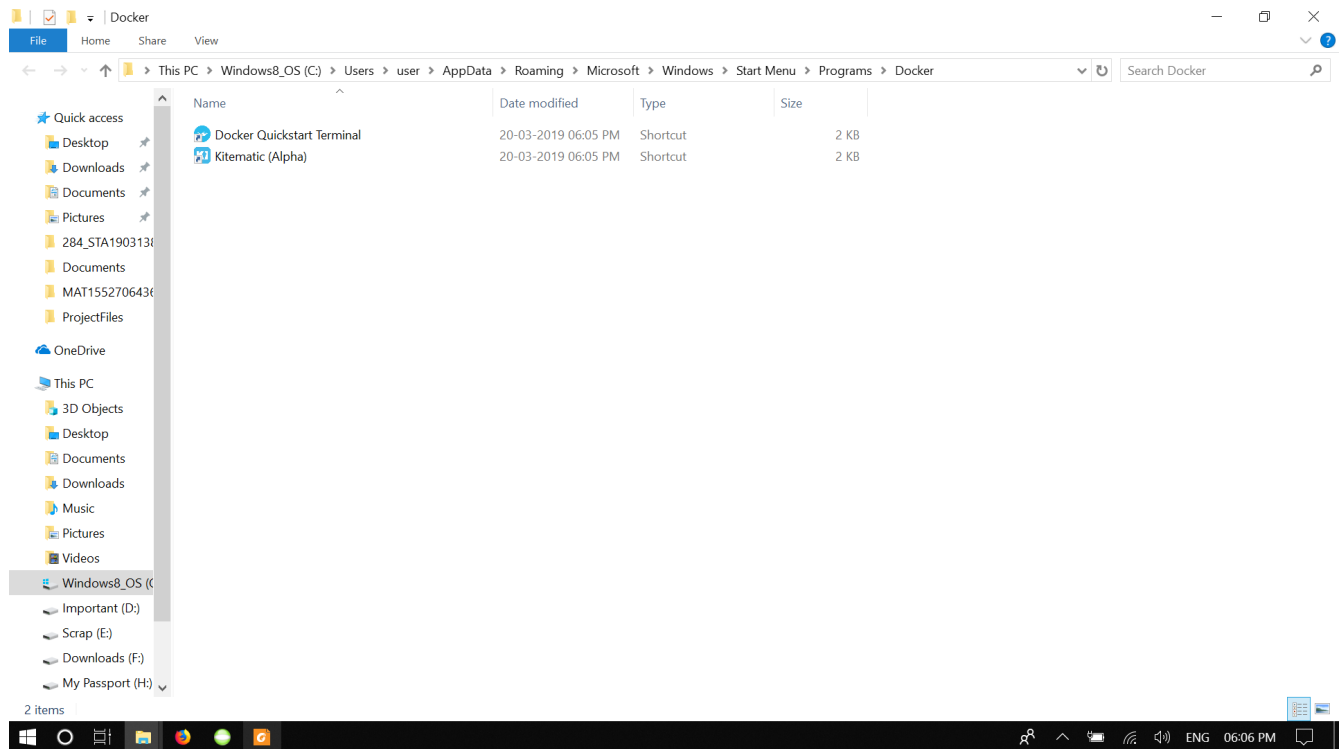
7.



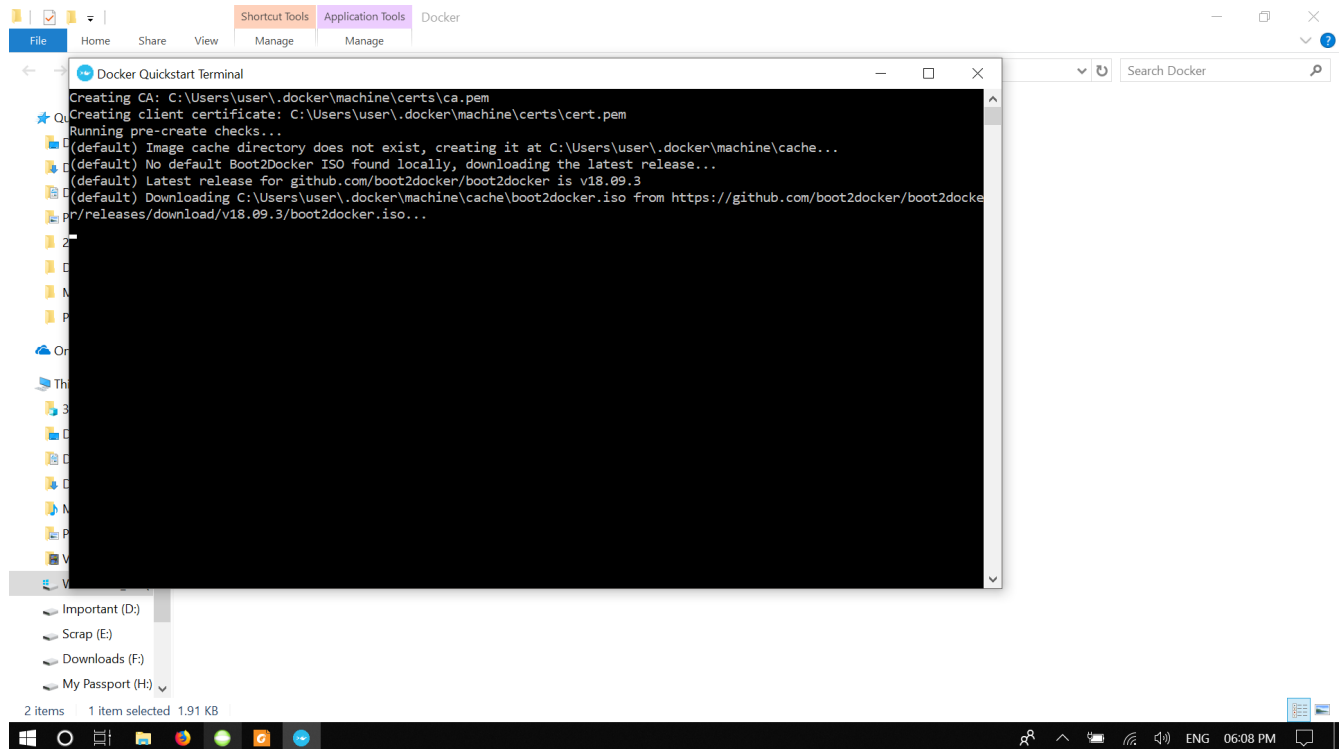
8.



9.

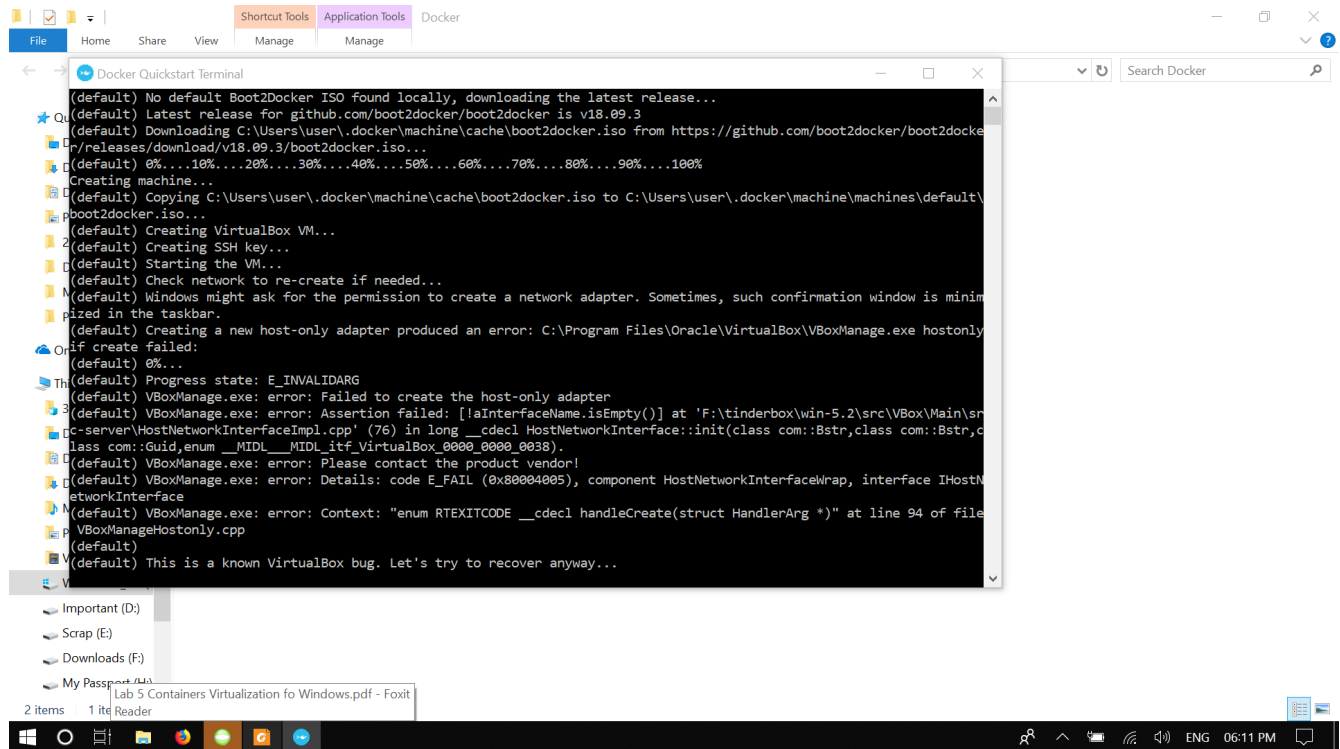


10.

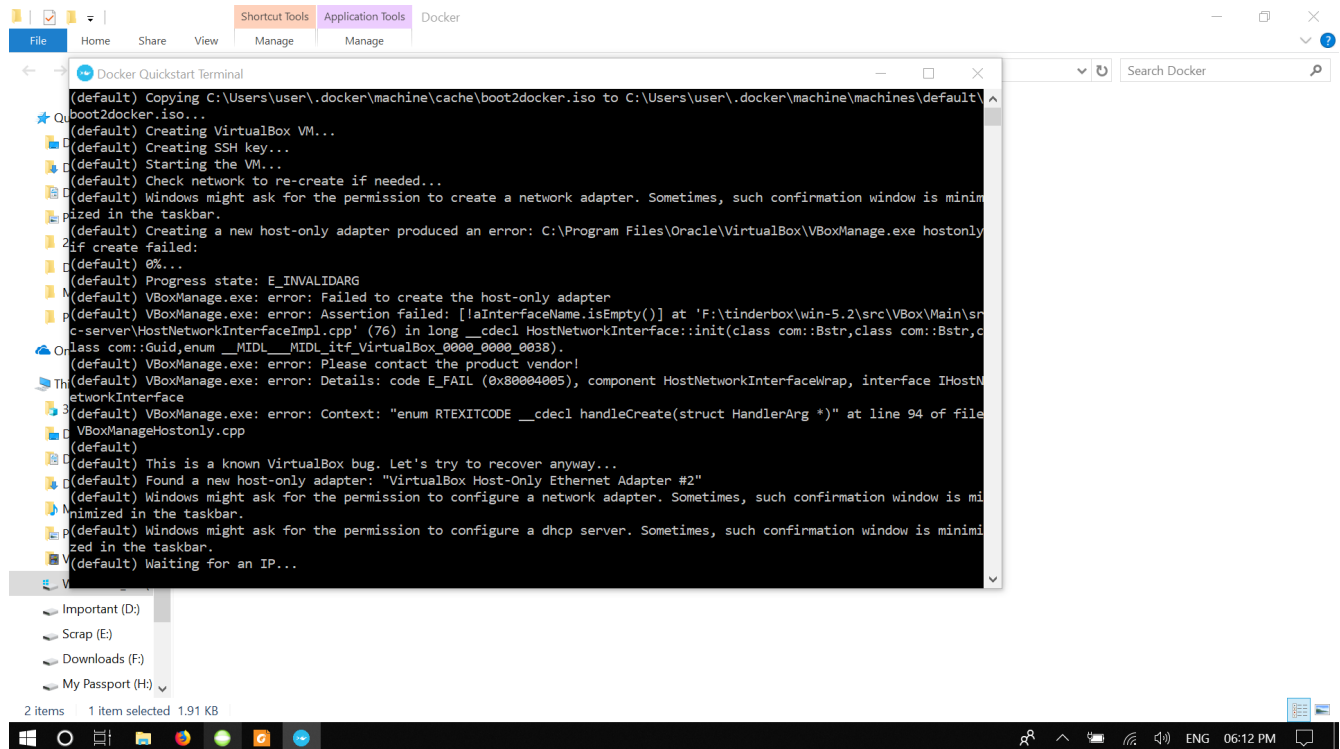




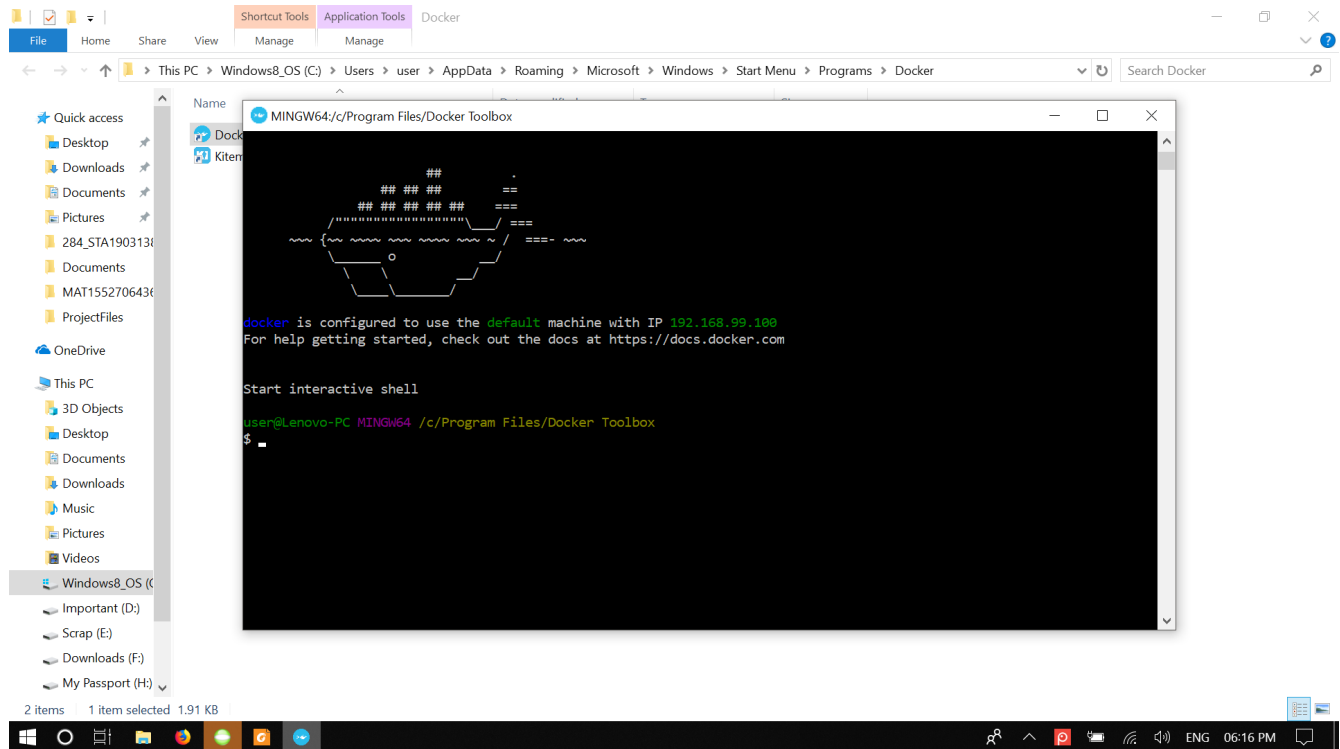
11.



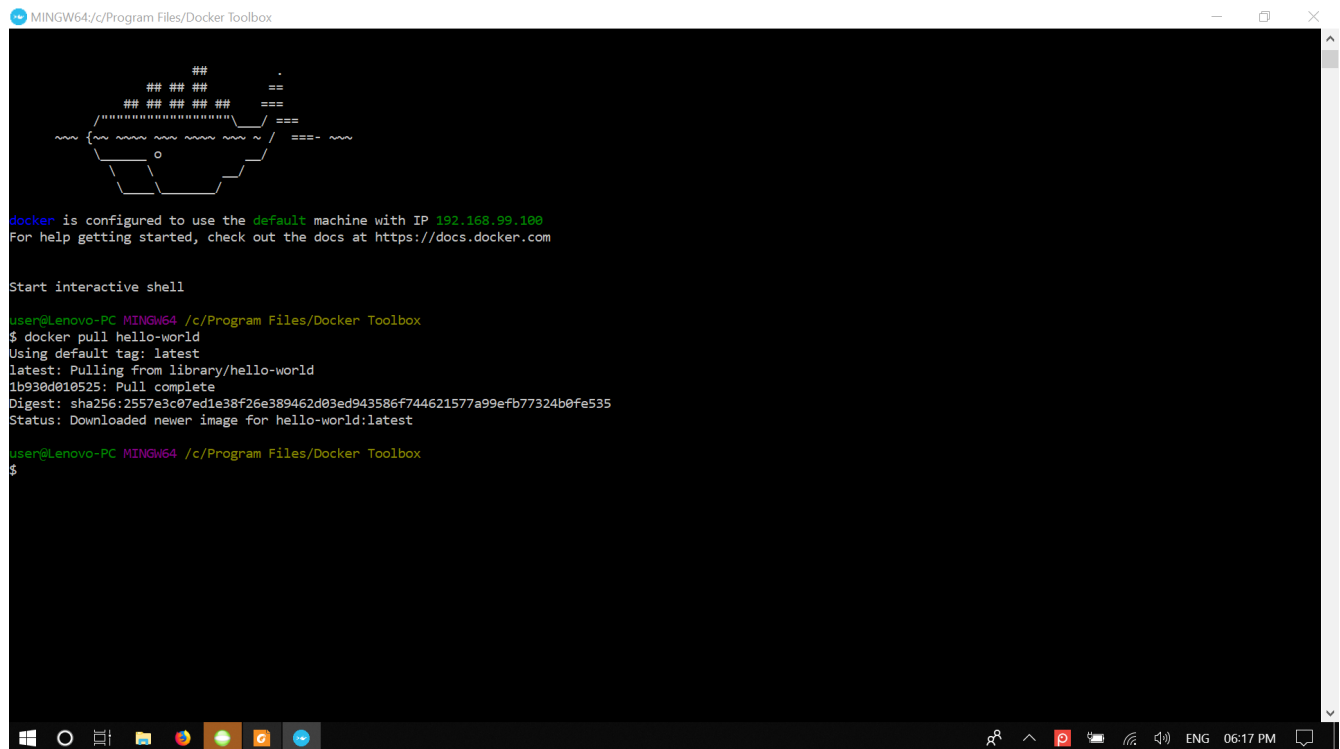
12.



13.



14.





15.

```
MINGW64/c/Program Files/Docker Toolbox
Docker is configured to use the default machine with IP 192.168.99.100
For help getting started, check out the docs at https://docs.docker.com

Start interactive shell

user@Lenovo-PC MINGW64 /c/Program Files/Docker Toolbox
$ docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
1b930d010525: Pull complete
Digest: sha256:2557e3c07ed1e38f26e389462d03ed943586f744621577a99efb77324b0fe535
Status: Downloaded newer image for hello-world:latest

user@Lenovo-PC MINGW64 /c/Program Files/Docker Toolbox
$ docker run hello-world

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
1. The Docker client contacted the Docker daemon.
2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
   (amd64)
3. The Docker daemon created a new container from that image which runs the
   executable that produces the output you are currently reading.
4. The Docker daemon streamed that output to the Docker client, which sent it
   to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
$ docker run -it ubuntu bash

Share images, automate workflows, and more with a free Docker ID:
https://hub.docker.com/

For more examples and ideas, visit:
https://docs.docker.com/get-started/

user@Lenovo-PC MINGW64 /c/Program Files/Docker Toolbox
$
```

16.

```
MINGW64/c/Program Files/Docker Toolbox
user@Lenovo-PC MINGW64 /c/Program Files/Docker Toolbox
$ docker -version
unknown shorthand flag: 'e' in -ersion
See 'docker --help'.

Usage: docker [OPTIONS] COMMAND

A self-sufficient runtime for containers

Options:
  --config string      Location of client config files (default
                        "C:\\Users\\user\\.docker")
  -D, --debug           Enable debug mode
  -H, --host list       Daemon socket(s) to connect to
  -l, --log-level string Set the logging level
                        ("debug"|"info"|"warn"|"error"|"fatal")
                        (default "info")
  --tls                Use TLS; implied by --tlsverify
  --tlscacert string    Trust certs signed only by this CA (default
                        "C:\\Users\\user\\.docker\\machine\\machines\\default\\ca.pem")
  --tlscert string      Path to TLS certificate file (default
                        "C:\\Users\\user\\.docker\\machine\\machines\\default\\cert.pem")
  --tlskey string        Path to TLS key file (default
                        "C:\\Users\\user\\.docker\\machine\\machines\\default\\key.pem")
  --tlsverify           Use TLS and verify the remote (default true)
  -v, --version         Print version information and quit

Management Commands:
  builder      Manage builds
  checkpoint   Manage checkpoints
  config        Manage Docker configs
  container     Manage containers
  image         Manage images
  manifest      Manage Docker image manifests and manifest lists
  network       Manage networks
  node          Manage Swarm nodes
  plugin        Manage plugins
  secret        Manage Docker secrets
  service       Manage services
  stack         Manage Docker stacks
  swarm         Manage Swarm
```

17.

```
MINGW64/c/Program Files/Docker Toolbox
user@Lenovo-PC MINGW64 /c/Program Files/Docker Toolbox
$ docker info
Containers: 1
  Running: 0
  Paused: 0
  Stopped: 1
Images: 1
Server Version: 18.09.3
Storage Driver: overlay2
  Backing Filesystem: extfs
  Supports d_type: true
  Native Overlay Diff: true
Logging Driver: json-file
Cgroup Driver: cgroupfs
Plugins:
  Volume: local
  Network: bridge host macvlan null overlay
  Log: awslogs fluentd gcplogs gelf journald json-file local logentries splunk syslog
Swarm: inactive
Runtimes: runc
Default Runtime: runc
Init Binary: docker-init
containerd version: e6b3f5632f50dbc4e9cb6288d911bf4f5e95b18e
runc version: 6635b4f0c6af3810594d2770f662f34ddc15b40d
init version: fec3683
Security Options:
  seccomp
    Profile: default
Kernel Version: 4.14.104-boot2docker
Operating System: Boot2Docker 18.09.3 (TCL 8.2.1)
OSType: linux
Architecture: x86_64
CPUs: 1
Total Memory: 989.4MiB
Name: default
ID: 6YHF:SZDG:Y3RI:ZBNN:UTGH:X2ZH:FTEF:N6BH:6ARF:4Q23:3RV7:646S
Docker Root Dir: /mnt/sda1/var/lib/docker
Debug Mode (client): false
Debug Mode (server): false
Registry: https://index.docker.io/v1/
Labels:
```

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```
MINGW64/c/Program Files/Docker Toolbox
user@Lenovo-PC MINGW64 /c/Program Files/Docker Toolbox
$ docker info
Volume: local
Network: bridge host macvlan null overlay
  Log: awslogs fluentd gcplogs gelf journald json-file local logentries splunk syslog
Swarm: inactive
Runtimes: runc
Default Runtime: runc
Init Binary: docker-init
containerd version: e6b3f5632f50dbc4e9cb6288d911bf4f5e95b18e
runc version: 6635b4f0c6af3810594d2770f662f34ddc15b40d
init version: fec3683
Security Options:
  seccomp
    Profile: default
Kernel Version: 4.14.104-boot2docker
Operating System: Boot2Docker 18.09.3 (TCL 8.2.1)
OSType: linux
Architecture: x86_64
CPUs: 1
Total Memory: 989.4MiB
Name: default
ID: 6YHF:SZDG:Y3RI:ZBNN:UTGH:X2ZH:FTEF:N6BH:6ARF:4Q23:3RV7:646S
Docker Root Dir: /mnt/sda1/var/lib/docker
Debug Mode (client): false
Debug Mode (server): false
Registry: https://index.docker.io/v1/
Labels:
  provider=virtualbox
Experimental: false
Insecure Registries:
  127.0.0.0/8
Live Restore Enabled: false
Product License: Community Engine

user@Lenovo-PC MINGW64 /c/Program Files/Docker Toolbox
$
```

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```

MINGW64/c/Program Files/Docker Toolbox
Volume: local
Network: bridge host macvlan null overlay
Log: awslogs fluentd gcplogs gelf journald json-file local logentries splunk syslog
Swarm: inactive
Runtimes: runc
Default Runtime: runc
Init Binary: docker-init
containerd version: e6b3f5632f50dbc4e9cb6288d911bf4f5e95b18e
runc version: 6635b4f0c6af3810594d2770f662f34ddc15b40d
init version: fec3683
Security Options:
  seccomp
   Profile: default
Kernel Version: 4.14.104-boot2docker
Operating System: Boot2Docker 18.09.3 (TCL 8.2.1)
OSType: linux
Architecture: x86_64
CPUs: 1
Total Memory: 989.4MiB
Name: default
ID: 6YHF:SZDG:Y3RI:ZBNN:UTGH:X2ZH:FTEF:N6BH:GARF:4Q23:3RV7:646S
Docker Root Dir: /mnt/sda1/var/lib/docker
Debug Mode (client): false
Debug Mode (server): false
Registry: https://index.docker.io/v1/
Labels:
  provider=virtualbox
Experimental: false
Insecure Registries:
  127.0.0.0/8
Live Restore Enabled: false
Product License: Community Engine

user@Lenovo-PC MINGW64 /c/Program Files/Docker Toolbox
$ docker image ls
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
hello-world          latest              fce289e99eb9       2 months ago       1.84kB

user@Lenovo-PC MINGW64 /c/Program Files/Docker Toolbox
$

```

20.

```

MINGW64/c/Program Files/Docker Toolbox

user@Lenovo-PC MINGW64 /c/Program Files/Docker Toolbox
$ docker image ls
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
hello-world          latest              fce289e99eb9       2 months ago       1.84kB

user@Lenovo-PC MINGW64 /c/Program Files/Docker Toolbox
$ Docker

Usage:  docker [OPTIONS] COMMAND

A self-sufficient runtime for containers

Options:
  --config string      Location of client config files (default
                        "C:\\Users\\user\\.docker")
  -D, --debug           Enable debug mode
  -H, --host list       Daemon socket(s) to connect to
  -l, --log-level string Set the logging level
                        ("debug"|"info"|"warn"|"error"|"fatal")
                        (default "info")
  --tls                Use TLS; implied by --tlsverify
  --tlscacert string    Trust certs signed only by this CA (default
                        "C:\\Users\\user\\.docker\\machine\\machines\\default\\ca.pem")
  --tlscert string      Path to TLS certificate file (default
                        "C:\\Users\\user\\.docker\\machine\\machines\\default\\cert.pem")
  --tlskey string       Path to TLS key file (default
                        "C:\\Users\\user\\.docker\\machine\\machines\\default\\key.pem")
  --tlsverify           Use TLS and verify the remote (default true)
  -v, --version         Print version information and quit

Management Commands:
  builder      Manage builds
  config       Manage Docker configs
  container    Manage containers
  image        Manage images
  network      Manage networks
  node         Manage Swarm nodes
  plugin       Manage plugins
  secret       Manage Docker secrets

```

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```
MINGW64/c/Program Files/Docker Toolbox
Run 'docker COMMAND --help' for more information on a command.

user@Lenovo-PC MINGW64 /c/Program Files/Docker Toolbox
$ Docker run -it ubuntu bash
Unable to find image 'ubuntu:latest' locally
latest: Pulling from library/ubuntu
898c46f3b1a1: Downloading [=====>] 8.916MB/32.47MB
63366dfa0a50: Download complete
041d4cd74a92: Download complete
6e1bee0f8701: Download complete
```

22.

```
root@e05720270891:/
Run 'docker COMMAND --help' for more information on a command.

user@Lenovo-PC MINGW64 /c/Program Files/Docker Toolbox
$ Docker run -it ubuntu bash
Unable to find image 'ubuntu:latest' locally
latest: Pulling from library/ubuntu
898c46f3b1a1: Pull complete
63366dfa0a50: Pull complete
041d4cd74a92: Pull complete
6e1bee0f8701: Pull complete
Digest: sha256:017eef0b616011647b269b5c65826e2e2ebddbe5d1f8c1e56b3599fb14fabec8
Status: Downloaded newer image for ubuntu:latest
root@e05720270891:/# ls
bin boot dev etc home lib lib64 media mnt opt proc root run sbin srv sys tmp usr var
root@e05720270891:/#
```



23.

```

root@e05720270891:/etc
Run 'docker COMMAND --help' for more information on a command.

user@Lenovo-PC MINGW64 /c/Program Files/Docker Toolbox
$ Docker run -it ubuntu bash
Unable to find image 'ubuntu:latest' locally
latest: Pulling from library/ubuntu
898c46f3b1a1: Pull complete
63366dfa0a50: Pull complete
041d4cd74a92: Pull complete
6a1bee0f8701: Pull complete
Digest: sha256:017eef0b616011647b269b5c65826e2e2ebddbe5d1f8c1e56b3599fb14fabec8
Status: Downloaded newer image for ubuntu:latest
root@e05720270891:/# ls
bin boot dev etc home lib lib64 media mnt opt proc root run sbin srv sys tmp usr var
root@e05720270891:/# cd etc
root@e05720270891:/etc# ls
adduser.conf      debconf.conf      fstab             hosts             ld.so.conf        lsb-release       opt               profile.d         rc5.d             security          subuid
alternatives      debian_version    gai.conf          init.d            ld.so.conf.d      machine-id         os-release        rc0.d            rc6.d            selinux          sysctl.conf
apt               default           group            issue            legal             libaudit.conf     mke2fs.conf      pam.conf         rc1.d            rc5.d            shadow
bash.bashrc       deluser.conf      gshadow           issue.net         libaudit.conf     mtab              pam.d            rc2.d            resolv.conf      shells           systemd
bindresvport.blacklist dpkg             host.conf        kernel            login.defs         networks          passwd           rc3.d            rmt              skel             terminfo
cron.daily         environment       hostname          ld.so.cache       logrotate.d       nsswitch.conf     profile          rc4.d            securetty        subgid          update-motd.d
root@e05720270891:/etc#

```

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```

root@e05720270891:/etc
root@e05720270891:/etc# cat passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mail List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin)/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
_apt:x:100:65534:/:/nonexistent:/usr/sbin/nologin
root@e05720270891:/etc#

```

25.

```
root@e05720270891:/etc
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
_apt:x:100:65534::/nonexistent:/usr/sbin/nologin
root@e05720270891:/etc# ls
adduser.conf      debconf.conf      fstab             hosts             ld.so.conf        lsb-release       opt              profile.d         rc5.d             security          subuid
alternatives      debian_version    gai.conf          init.d            ld.so.conf.d      machine-id         os-release       rc0.d            rc6.d            selinux          sysctl.conf
apt               default           group            issue            legal             mke2fs.conf       pam.conf         rc1.d            rcS.d            shadow          sysctl.d
bash.bashrc       deluser.conf      gshadow          issue.net         libaudit.conf     mtab              pam.d           rc2.d            resolv.conf      shells          systemd
bindresvport.blacklist dpkg             host.conf        kernel            login.defs         networks          passwd          rc3.d            rmt              skel             terminfo
cron.daily         environment       hostname          ld.so.cache       logrotate.d       nsswitch.conf     profile         rc4.d            securetty        subgid          update-motd.d
root@e05720270891:/etc# cat shadow
root:*:17962:0:99999:7:::
daemon:*:17962:0:99999:7:::
bin:*:17962:0:99999:7:::
sys:*:17962:0:99999:7:::
sync:*:17962:0:99999:7:::
games:*:17962:0:99999:7:::
man:*:17962:0:99999:7:::
lp:*:17962:0:99999:7:::
mail:*:17962:0:99999:7:::
news:*:17962:0:99999:7:::
uucp:*:17962:0:99999:7:::
proxy:*:17962:0:99999:7:::
www-data:*:17962:0:99999:7:::
backup:*:17962:0:99999:7:::
list:*:17962:0:99999:7:::
irc:*:17962:0:99999:7:::
gnats:*:17962:0:99999:7:::
nobody:*:17962:0:99999:7:::
_apt:*:17962:0:99999:7:::
root@e05720270891:/etc#
```