

**Experiment 12**  
**Docker Installation**  
**Roll no: R171218009**

Updating package database:

```
akansha@akansha-vb:~$ sudo apt update

Get:1 http://security.ubuntu.com/ubuntu bionic-security InRelease [88.7 kB]
Hit:2 http://in.archive.ubuntu.com/ubuntu bionic InRelease
Hit:3 http://in.archive.ubuntu.com/ubuntu bionic-updates InRelease
Hit:4 http://in.archive.ubuntu.com/ubuntu bionic-backports InRelease
Get:5 http://security.ubuntu.com/ubuntu bionic-security/main amd64 DEP-11 Metad
ata [49.0 kB]
Get:6 http://security.ubuntu.com/ubuntu bionic-security/universe amd64 DEP-11 M
etadata [59.5 kB]
Get:7 http://security.ubuntu.com/ubuntu bionic-security/multiverse amd64 DEP-11
Metadata [2,464 B]
Fetched 200 kB in 3s (77.0 kB/s)
Reading package lists... Done
Building dependency tree
Reading state information... Done
402 packages can be upgraded. Run 'apt list --upgradable' to see them.
```

Adding the GPG(GNU Privacy Guard) key for the official Docker repository (to ensure that the files to be downloaded are authentic):

```
akansha@akansha-vb:~$ curl -fsSL https://download.docker.com/linux/ubuntu/gpg |
sudo apt-key add -

OK
```

Adding the docker repository to APT sources to download docker from this repository:

```
akansha@akansha-vb:~$ sudo add-apt-repository "deb [arch=amd64] https://downloa
d.docker.com/linux/ubuntu bionic stable"

Hit:1 http://in.archive.ubuntu.com/ubuntu bionic InRelease
Hit:2 http://in.archive.ubuntu.com/ubuntu bionic-updates InRelease
Hit:3 http://in.archive.ubuntu.com/ubuntu bionic-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu bionic-security InRelease
Get:5 https://download.docker.com/linux/ubuntu bionic InRelease [64.4 kB]
Get:6 https://download.docker.com/linux/ubuntu bionic/stable amd64 Packages [13
.0 kB]
Fetched 77.4 kB in 1s (62.6 kB/s)
Reading package lists... Done
akansha@akansha-vb:~$
```

Updating:

```
akansha@akansha-vb:~$ sudo apt update
Hit:1 http://in.archive.ubuntu.com/ubuntu bionic InRelease
Get:2 http://in.archive.ubuntu.com/ubuntu bionic-updates InRelease [88.7 kB]
Hit:3 http://security.ubuntu.com/ubuntu bionic-security InRelease
Hit:4 https://download.docker.com/linux/ubuntu bionic InRelease
Get:5 http://in.archive.ubuntu.com/ubuntu bionic-backports InRelease [74.6 kB]
Get:6 http://in.archive.ubuntu.com/ubuntu bionic-updates/main amd64 DEP-11 Meta
data [294 kB]
Get:7 http://in.archive.ubuntu.com/ubuntu bionic-updates/universe amd64 DEP-11
Metadata [288 kB]
Get:8 http://in.archive.ubuntu.com/ubuntu bionic-updates/multiverse amd64 DEP-1
1 Metadata [2,464 B]
Get:9 http://in.archive.ubuntu.com/ubuntu bionic-backports/universe amd64 DEP-1
1 Metadata [9,288 B]
Fetched 758 kB in 3s (254 kB/s)
Reading package lists... Done
Building dependency tree
Reading state information... Done
398 packages can be upgraded. Run 'apt list --upgradable' to see them.
```

Ensuring that docker is going to be installed from the docker repository

```
akansha@akansha-vb:~$ apt-cache policy docker-ce
docker-ce:
  Installed: (none)
  Candidate: 5:19.03.13~3-0~ubuntu-bionic
  Version table:
     5:19.03.13~3-0~ubuntu-bionic 500
        500 https://download.docker.com/linux/ubuntu bionic/stable amd64 Packag
es
     5:19.03.12~3-0~ubuntu-bionic 500
        500 https://download.docker.com/linux/ubuntu bionic/stable amd64 Packag
es
     5:19.03.11~3-0~ubuntu-bionic 500
        500 https://download.docker.com/linux/ubuntu bionic/stable amd64 Packag
es
     5:19.03.10~3-0~ubuntu-bionic 500
        500 https://download.docker.com/linux/ubuntu bionic/stable amd64 Packag
es
```

Installing docker:

```
akansha@akansha-vb:~$ sudo apt install docker-ce
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  aufs-tools cgroupfs-mount containerd.io docker-ce-cli git git-man
  liberror-perl pigz
Suggested packages:
  git-daemon-run | git-daemon-sysvinit git-doc git-el git-email git-gui gitk
  gitweb git-cvs git-mediawiki git-svn
The following NEW packages will be installed:
  aufs-tools cgroupfs-mount containerd.io docker-ce docker-ce-cli git git-man
  liberror-perl pigz
0 upgraded, 9 newly installed, 0 to remove and 398 not upgraded.
Need to get 96.0 MB of archives.
After this operation, 444 MB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://in.archive.ubuntu.com/ubuntu bionic/universe amd64 pigz amd64 2.4-
1 [57.4 kB]
```

Checking docker service status:

```
akansha@akansha-vb:~$ sudo systemctl status docker
● docker.service - Docker Application Container Engine
   Loaded: loaded (/lib/systemd/system/docker.service; enabled; vendor preset:
   Active: active (running) since Mon 2020-11-23 00:25:17 IST; 2min 44s ago
     Docs: https://docs.docker.com
    Main PID: 13125 (dockerd)
      Tasks: 8
     CGroup: /system.slice/docker.service
             └─13125 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/conta

Nov 23 00:25:09 akansha-vb dockerd[13125]: time="2020-11-23T00:25:09.670007565+
Nov 23 00:25:09 akansha-vb dockerd[13125]: time="2020-11-23T00:25:09.671236175+
Nov 23 00:25:09 akansha-vb dockerd[13125]: time="2020-11-23T00:25:09.671389068+
Nov 23 00:25:09 akansha-vb dockerd[13125]: time="2020-11-23T00:25:09.671723867+
Nov 23 00:25:11 akansha-vb dockerd[13125]: time="2020-11-23T00:25:11.281704312+
Nov 23 00:25:12 akansha-vb dockerd[13125]: time="2020-11-23T00:25:12.103261880+
Nov 23 00:25:15 akansha-vb dockerd[13125]: time="2020-11-23T00:25:15.653878336+
Nov 23 00:25:15 akansha-vb dockerd[13125]: time="2020-11-23T00:25:15.752864688+
Nov 23 00:25:17 akansha-vb systemd[1]: Started Docker Application Container Eng
Nov 23 00:25:17 akansha-vb dockerd[13125]: time="2020-11-23T00:25:17.555693103+
akansha@akansha-vb:~$
akansha@akansha-vb:~$ docker --version
Docker version 19.03.13, build 4484c46d9d
```

Docker is in running state.

Run 'docker images' command to list docker images available in system.

```
akansha@akansha-vb:~$ sudo docker images
REPOSITORY          TAG                 IMAGE ID            CREATED
SIZE
```