Install Docker

Make sure curl is installed on the Ubuntu VM:

```
sudo apt update

sudo apt install curl
```

If you are behind a corporate firewall (replace "*proxyhost:port*" with your actual proxy information)

```
https_proxy="https://proxyhost:port" curl -fsSL https://apt.dockerproject.org/gpg | sudo apt-key add -
```

Otherwise:

```
curl -fsSL https://apt.dockerproject.org/gpg | sudo apt-key add -
```

Expected Response:

```
OK
```

Add the docker package repository:

```
sudo apt-add-repository "deb https://apt.dockerproject.org/repo ubuntu-xenial main"
```

Install packages:

```
sudo apt update

sudo apt-cache policy docker-engine

sudo apt install docker-engine

sudo apt install docker-compose
```

If you are behind a corporate firewall, you will need to configure proxy settings for docker so that images may be obtained from internet repositories. In the commands shown here, replace "*proxyhost:port*", "*yourdomain1.com*", and "*yourdomain2.com*" with appropriate values.

Make the docker configuration directory:

```
sudo mkdir -p /etc/systemd/system/docker.service.d
```

Edit (create) this file:

```
sudo vi /etc/systemd/system/docker.service.d/http-proxy.conf
```

Add these lines:

```
[Service]
Environment="HTTP_PROXY=https://proxyhost:port"
Environment="HTTPS_PROXY=https://proxyhost:port"
Environment="NO_PROXY=localhost,127.0.0.1,.yourdomain1.com,.yourdomain2.com"
```

Restart docker:

```
sudo systemctl daemon-reload

sudo systemctl restart docker
```

Add yourself to the docker user group (replace "userid" with your user ID):

```
sudo usermod -a -G docker userid
```

Log out and log back in so that the user group change will takeeffect.

Verify that you can connect to docker as yourself (i.e. not as root):

```
docker ps
```

Verify that you can download and run the hello-world container

```
docker run hello-world
```

```
pluto                                                    _ □ ×

rd472p@pluto:~$ docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
5b0f327be733: Pull complete
Digest: sha256:1f19634d26995c320618d94e6f29c09c6589d5df3c063287a00e6de8458f8242
Status: Downloaded newer image for hello-world:latest

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.
 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://cloud.docker.com/

For more examples and ideas, visit:
 https://docs.docker.com/engine/userguide/
```