DOCKER LAB - 1 Building the first Container - Hello World

SSH to your AWS Workstation

ssh devops@<public-ip-addr> of your Workstation
Password is : Dev0p$!!/

1. Check if Docker is installed and running.

```
$ sudo su
# docker version
```

```
root@ip-172-31-40-214:/home/devops/application# docker version
Client:
 Version:           18.09.2
 API version:       1.39
 Go version:        go1.10.4
 Git commit:        6247962
 Built:             Tue Feb 26 23:52:23 2019
 OS/Arch:           linux/amd64
 Experimental:      false

Server:
 Engine:
  Version:          18.09.2
  API version:      1.39 (minimum version 1.12)
  Go version:       go1.10.4
  Git commit:       6247962
  Built:            Wed Feb 13 00:24:14 2019
  OS/Arch:          linux/amd64
  Experimental:     false
root@ip-172-31-40-214:/home/devops/application#
```

2. Create the first hello-world container.

```
# docker run hello-world
```

"Docker will search the local image repo and if the hello world image is not present it will then download it from the docker hub. (docker hub is the default search engine where docker pulls new images from DockerHub default repository)"

```
root@ip-172-31-40-214:/home/devops/application# docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
1b930d010525: Pull complete
Digest: sha256:92695bc579f31df7a63da6922075d0666e565ceccad16b59c3374d2cf4e8e50e
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.
    (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/
```

To download a particular image, or set of images (i.e., a repository), use docker pull as below.

3. The below command will always use the default tag as latest

```
# docker pull nginx
```

4. Pull image based on tags

```
# docker pull nginx:stable
```

5. The below command will use list all the docker images available on your local repository

```
# docker images
```

```
root@ip-172-31-40-214:/home/devops/application# docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
nginx               latest              27a188018e18        13 hours ago        109MB
nginx               stable              295c7be07902        3 weeks ago         109MB
hello-world         latest              fce289e99eb9        3 months ago        1.84kB
root@ip-172-31-40-214:/home/devops/application#
```