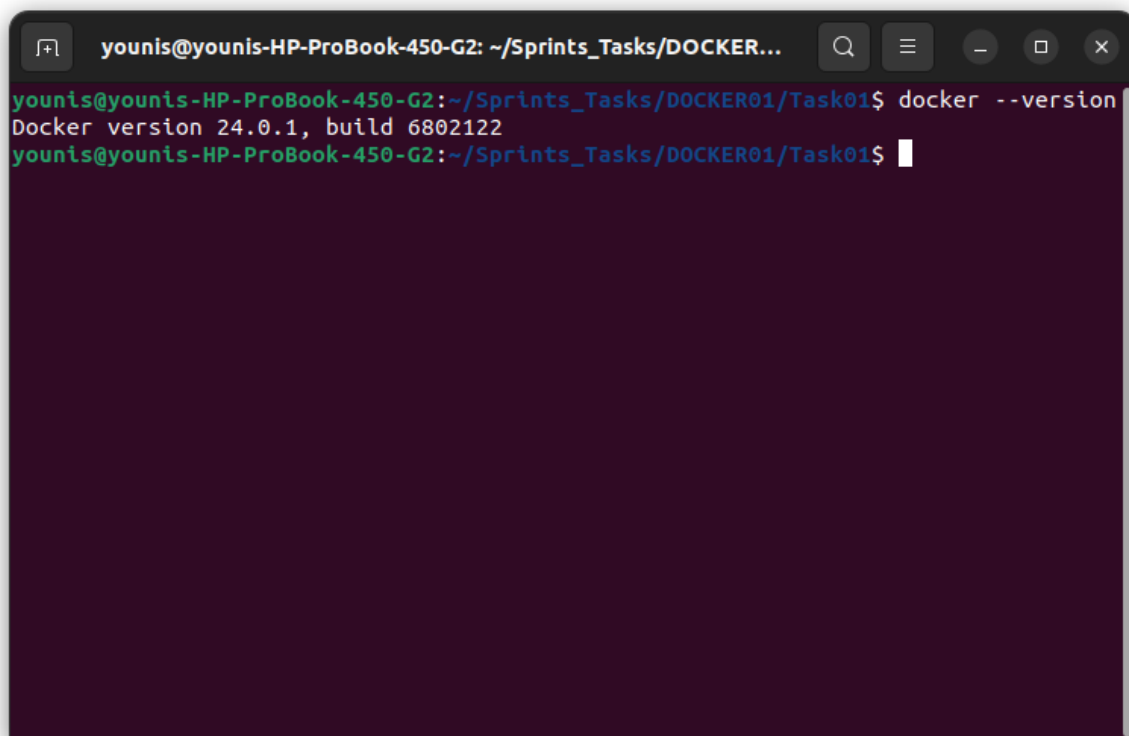
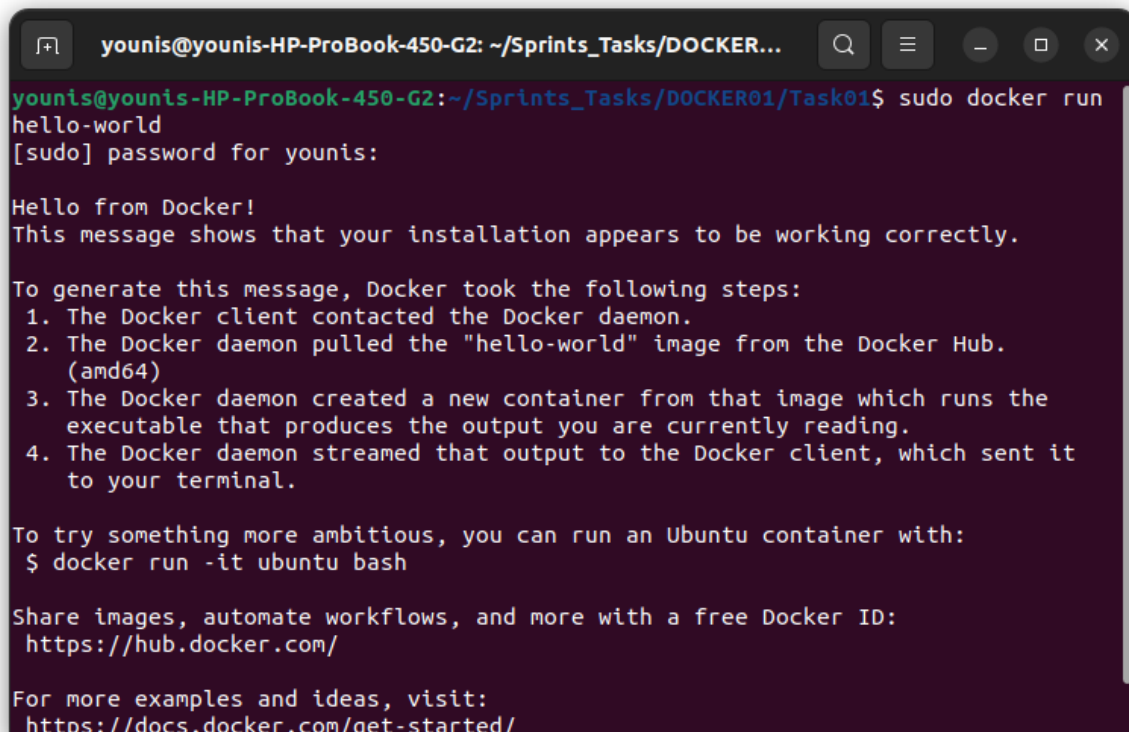


check the docker version installed



```
younis@younis-HP-ProBook-450-G2: ~/Sprints_Tasks/DOCKER...
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$ docker --version
Docker version 24.0.1, build 6802122
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$
```

run docker container for hello-world



```
younis@younis-HP-ProBook-450-G2: ~/Sprints_Tasks/DOCKER...
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$ sudo docker run
hello-world
[sudo] password for younis:

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/
```

run docker container redis in detached mode

```
younis@younis-HP-ProBook-450-G2: ~/Sprints_Tasks/DOCKER...
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$ sudo docker run
-d redis
Unable to find image 'redis:latest' locally
latest: Pulling from library/redis
f03b40093957: Pull complete
8db26c5e8435: Pull complete
37e84c7a626f: Pull complete
806c192e0375: Pull complete
08769906aa59: Pull complete
635073d8ccd5: Pull complete
Digest: sha256:f9724694a0b97288d2255ff2b69642dfba7f34c8e41aaf0a59d33d10d8a42687
Status: Downloaded newer image for redis:latest
0b13ac0caf1aedb1490f420abd65c6876e09f9dc114a6db7a471d93e98ba9500
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$
```

try to stop the running redis container

```
younis@younis-HP-ProBook-450-G2: ~/Sprints_Tasks/DOCKER01/Task01
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$ sudo docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS        PORTS          NAMES
0b13ac0caf1a   redis    "docker-entrypoint.s..." 2 minutes ago  Up 2 minutes  6379/tcp       upbeat_arding
helll
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$ sudo docker stop 0b13ac0caf1a
0b13ac0caf1a
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$ sudo docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS        PORTS          NAMES
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$
```

check the present container on the host

```
younis@younis-HP-ProBook-450-G2: ~/Sprints_Tasks/DOCKER01/Task01
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$ sudo docker ps -a
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS
PORTS         NAMES
0b13ac0caf1a   redis         "docker-entrypoint.s..." 4 minutes ago  Exited (0) About a minute ago
ce8e6d756724   upbeat_ardinghelli hello-world             6 minutes ago  Exited (0) 5 minutes ago
796d70e7a7b3   sweet_dhawan  "/hello"                 6 days ago    Exited (0) 4 days ago
ff9a57e3e326   nginxdocker-image "/docker-entrypoint...." 6 days ago    Created
d106ded31ef1   sharp_merkle  "/docker-entrypoint...." 6 days ago    Created
9a155d3a989e   mystifying_rubin "/docker-entrypoint...." 6 days ago    Exited (0) 4 days ago
3fa3b2077bb3   heuristic_mccarthy "/docker-entrypoint...." 6 days ago    Exited (0) 4 days ago
d9ee780a2977   jovial_cartwright "/docker-entrypoint...." 6 days ago    Exited (0) 4 days ago
frosty_leavitt eloquent_hoover "/docker-entrypoint...." 6 days ago    Exited (0) 4 days ago
frosty_leavitt hello-world      "/hello"                 7 days ago    Exited (0) 7 days ago
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$
```

check the ID of the redis container

```
younis@younis-HP-ProBook-450-G2: ~/Sprints_Tasks/DOCKER01/Task01
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$ sudo docker ps -a
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS
PORTS         NAMES
0b13ac0caf1a   redis         "docker-entrypoint.s..." 4 minutes ago  Exited (0) About a minute ago
upbeat_ardinghelli
```

try to run a container from nginx:alpine and delete image

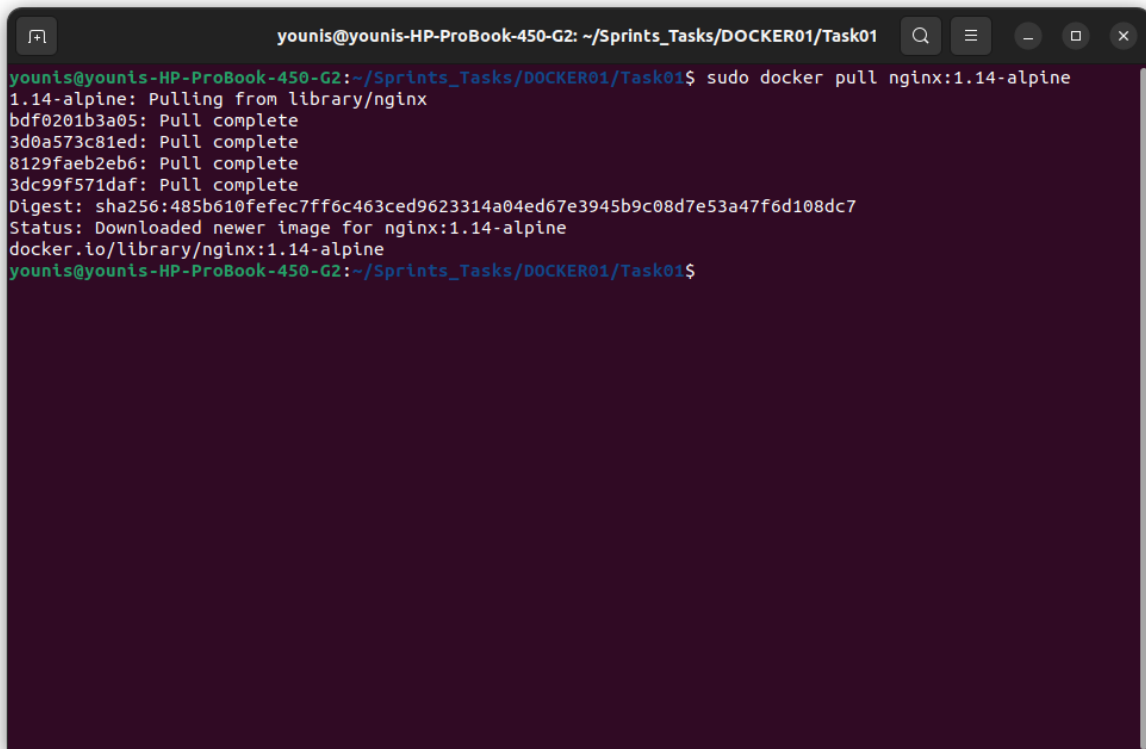
```
younis@younis-HP-ProBook-450-G2: ~/Sprints_Tasks/DOCKER01/Task01
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$ sudo docker run nginx:alpine
Unable to find image 'nginx:alpine' locally
alpine: Pulling from library/nginx
f56be85fc22e: Pull complete
97c80f11709c: Pull complete
afb503c1f124: Pull complete
f8c948b732dd: Pull complete
d021bba29710: Pull complete
cadcca1af197: Pull complete
4aacde79cec4: Pull complete
Digest: sha256:2e776a66a3556f001aba13431b26e448fe8acba277bf93d2ab1a785571a46d90
Status: Downloaded newer image for nginx:alpine
/docker-entrypoint.sh: /docker-entrypoint.d/ is not empty, will attempt to perform configuration
/docker-entrypoint.sh: Looking for shell scripts in /docker-entrypoint.d/
/docker-entrypoint.sh: Launching /docker-entrypoint.d/10-listen-on-ipv6-by-default.sh
10-listen-on-ipv6-by-default.sh: info: Getting the checksum of /etc/nginx/conf.d/default.conf
10-listen-on-ipv6-by-default.sh: info: Enabled listen on IPv6 in /etc/nginx/conf.d/default.conf
/docker-entrypoint.sh: Launching /docker-entrypoint.d/20-envsubst-on-templates.sh
/docker-entrypoint.sh: Launching /docker-entrypoint.d/30-tune-worker-processes.sh
/docker-entrypoint.sh: Configuration complete; ready for start up
2023/05/24 23:43:28 [notice] 1#1: using the "epoll" event method
2023/05/24 23:43:28 [notice] 1#1: nginx/1.25.0
2023/05/24 23:43:28 [notice] 1#1: built by gcc 12.2.1 20220924 (Alpine 12.2.1_glt20220924-r4)
2023/05/24 23:43:28 [notice] 1#1: OS: Linux 5.19.0-41-generic
2023/05/24 23:43:28 [notice] 1#1: getrlimit(RLIMIT_NOFILE): 1048576:1048576
2023/05/24 23:43:28 [notice] 1#1: start worker processes
2023/05/24 23:43:28 [notice] 1#1: start worker process 31
2023/05/24 23:43:28 [notice] 1#1: start worker process 32
2023/05/24 23:43:28 [notice] 1#1: start worker process 33
2023/05/24 23:43:28 [notice] 1#1: start worker process 34
2023/05/24 23:43:34 [notice] 1#1: signal 28 (SIGWINCH) received
2023/05/24 23:43:34 [notice] 1#1: signal 28 (SIGWINCH) received
```

```
younis@younis-HP-ProBook-450-G2: ~/Sprints_Tasks/DOCKER01/Task01
younis@younis-HP-ProBook-450-G2: ~/Sprints_Tasks/DO... x younis@younis-HP-ProBook-450-G2: ~/Sprints_Tasks/DO... x v
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$ sudo docker ps
[sudo] password for younis:
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS        PORTS        NAMES
3887bcdbe457   nginx:alpine  "/docker-entrypoint..."  35 seconds ago  Up 33 seconds  80/tcp       epic_ka
re
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$ sudo docker stop 3887bcdbe457
3887bcdbe457
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$ sudo docker image ls
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
nginx         alpine    fe7edaf8a8dc   About an hour ago  41.4MB
redis         latest    0ec8ab59a35f   37 hours ago    117MB
nginxdocker-image  latest    d0677d8f6c79   6 days ago     142MB
hello-world    latest    9c7a54a9a43c   2 weeks ago     13.3kB
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$ sudo docker rmi fe7edaf8a8dc --force
Untagged: nginx:alpine
Untagged: nginx@sha256:2e776a66a3556f001aba13431b26e448fe8acba277bf93d2ab1a785571a46d90
Deleted: sha256:fe7edaf8a8dcf9af72f49cf0a0219e3ace17667bafc537f0d4a0ab1bd7f10467
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$
```

delete the image redis

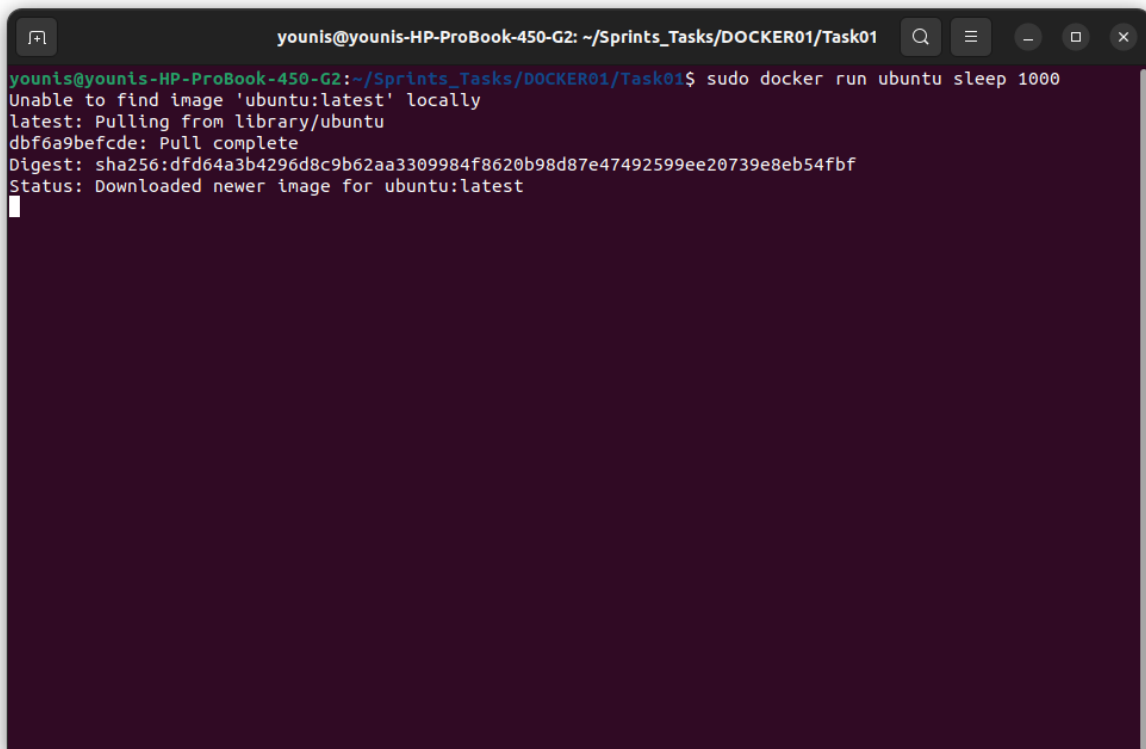
```
younis@younis-HP-ProBook-450-G2: ~/Sprints_Tasks/DOCKER01/Task01
younis@younis-HP-ProBook-450-G... x younis@younis-HP-ProBook-450-G... x younis@younis-HP-ProBook-450-G... x v
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$ sudo docker image ls
[sudo] password for younis:
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
redis         latest    0ec8ab59a35f   37 hours ago    117MB
nginxdocker-image  latest    d0677d8f6c79   6 days ago     142MB
hello-world    latest    9c7a54a9a43c   2 weeks ago     13.3kB
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$ sudo docker rmi 0ec8ab59a35f --force
Untagged: redis:latest
Untagged: redis@sha256:f9724694a0b97288d2255ff2b69642dfba7f34c8e41aaf0a59d33d10d8a42687
Deleted: sha256:0ec8ab59a35faa3aaee416630128e11949d44ac82d15d43053f8af5d61182a5d
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$
```

pull image from nginx:1.14-alpine



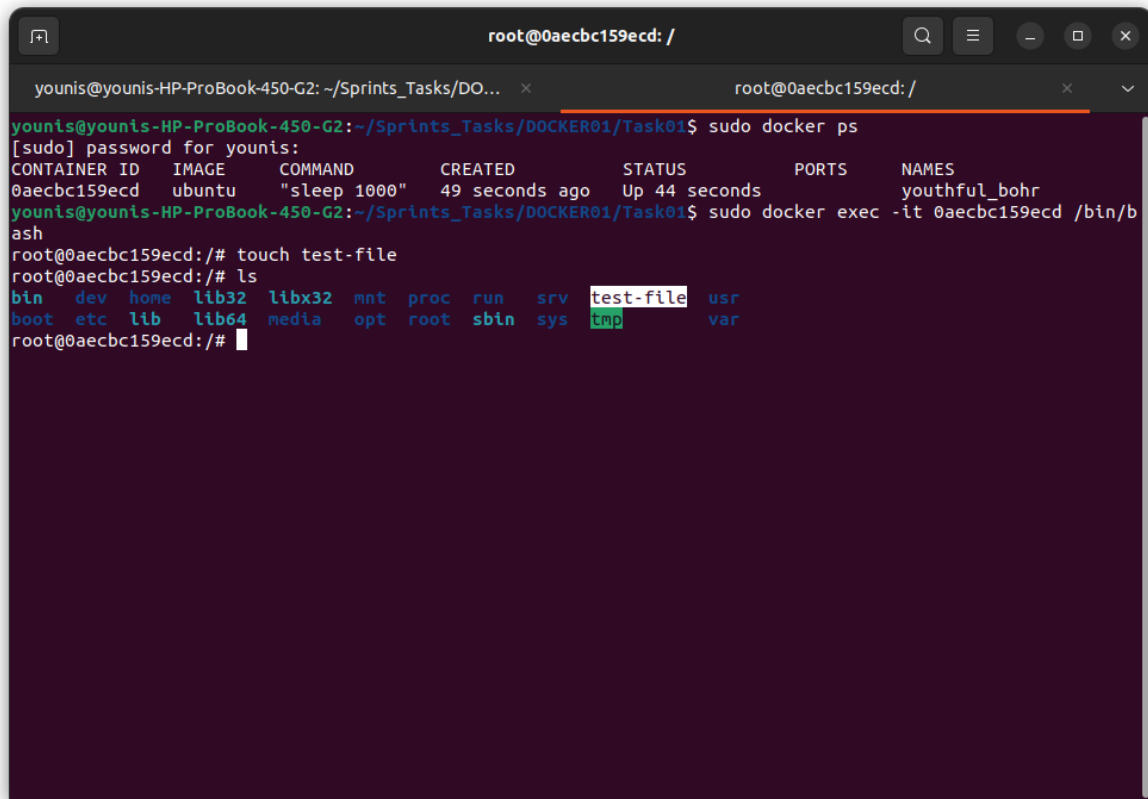
```
younis@younis-HP-ProBook-450-G2: ~/Sprints_Tasks/DOCKER01/Task01
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$ sudo docker pull nginx:1.14-alpine
1.14-alpine: Pulling from library/nginx
bdf0201b3a05: Pull complete
3d0a573c81ed: Pull complete
8129faeb2eb6: Pull complete
3dc99f571daf: Pull complete
Digest: sha256:485b610fefec7ff6c463ced9623314a04ed67e3945b9c08d7e53a47f6d108dc7
Status: Downloaded newer image for nginx:1.14-alpine
docker.io/library/nginx:1.14-alpine
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$
```

Run an instance of the ubuntu image to run the sleep 1000 command at startup.



```
younis@younis-HP-ProBook-450-G2: ~/Sprints_Tasks/DOCKER01/Task01
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$ sudo docker run ubuntu sleep 1000
Unable to find image 'ubuntu:latest' locally
latest: Pulling from library/ubuntu
dbf6a9befcde: Pull complete
Digest: sha256:dfd64a3b4296d8c9b62aa3309984f8620b98d87e47492599ee20739e8eb54fbf
Status: Downloaded newer image for ubuntu:latest
```

Exec into the container and touch a file called test-file



The image shows a terminal window with two tabs. The active tab is titled 'root@0aecbc159ecd: /'. The terminal output shows the following sequence of commands and results:

```
younis@younis-HP-ProBook-450-G2: ~/Sprints_Tasks/DO... x root@0aecbc159ecd: /  
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$ sudo docker ps  
[sudo] password for younis:  
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS        PORTS   NAMES  
0aecbc159ecd   ubuntu    "sleep 1000"            49 seconds ago Up 44 seconds          youthful_bohr  
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$ sudo docker exec -it 0aecbc159ecd /bin/b  
ash  
root@0aecbc159ecd:/# touch test-file  
root@0aecbc159ecd:/# ls  
bin  dev  home  lib32  libx32  mnt  proc  run  srv  test-file  usr  
boot  etc  lib   lib64  media  opt  root  sbin  sys  tmp       var  
root@0aecbc159ecd:/#
```

Run a container with the nginx:alpine image and name it web

```
younis@younis-HP-ProBook-450-G2: ~/Sprints_Tasks/DOCKER01/Task01
younis@younis-HP-ProBook-450-G2: ~/Sprints_Tasks/DO... x younis@younis-HP-ProBook-450-G2: ~/Sprints_Tasks/DO... x
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$ sudo docker run --name web nginx:alpine
Unable to find image 'nginx:alpine' locally
alpine: Pulling from library/nginx
f56be85fc22e: Already exists
97c80f11709c: Already exists
afb503c1f124: Already exists
f8c948b732dd: Already exists
d021bba29710: Already exists
cadcca1af197: Already exists
4aacde79cec4: Already exists
Digest: sha256:2e776a66a3556f001aba13431b26e448fe8acba277bf93d2ab1a785571a46d90
Status: Downloaded newer image for nginx:alpine
/docker-entrypoint.sh: /docker-entrypoint.d/ is not empty, will attempt to perform configuration
/docker-entrypoint.sh: Looking for shell scripts in /docker-entrypoint.d/
/docker-entrypoint.sh: Launching /docker-entrypoint.d/10-listen-on-ipv6-by-default.sh
10-listen-on-ipv6-by-default.sh: info: Getting the checksum of /etc/nginx/conf.d/default.conf
10-listen-on-ipv6-by-default.sh: info: Enabled listen on IPv6 in /etc/nginx/conf.d/default.conf
/docker-entrypoint.sh: Launching /docker-entrypoint.d/20-envsubst-on-templates.sh
/docker-entrypoint.sh: Launching /docker-entrypoint.d/30-tune-worker-processes.sh
/docker-entrypoint.sh: Configuration complete; ready for start up
2023/05/25 00:01:02 [notice] 1#1: using the "epoll" event method
2023/05/25 00:01:02 [notice] 1#1: nginx/1.25.0
2023/05/25 00:01:02 [notice] 1#1: built by gcc 12.2.1 20220924 (Alpine 12.2.1_git20220924-r4)
2023/05/25 00:01:02 [notice] 1#1: OS: Linux 5.19.0-41-generic
2023/05/25 00:01:02 [notice] 1#1: getrlimit(RLIMIT_NOFILE): 1048576:1048576
2023/05/25 00:01:02 [notice] 1#1: start worker processes
2023/05/25 00:01:02 [notice] 1#1: start worker process 30
2023/05/25 00:01:02 [notice] 1#1: start worker process 31
2023/05/25 00:01:02 [notice] 1#1: start worker process 32
2023/05/25 00:01:02 [notice] 1#1: start worker process 33
```

delete all the images from the host

```
younis@younis-HP-ProBook-450-G2: ~/Sprints_Tasks/DOCKER01/Task01
younis@younis-HP-ProBook-450-G... x younis@younis-HP-ProBook-450-G... x younis@younis-HP-ProBook-450-G... x
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$ sudo docker image ls
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
nginx                alpine              fe7edaf8a8dc        2 hours ago        41.4MB
nginxdocker-image    latest              d0677d8f6c79        6 days ago         142MB
hello-world          latest              9c7a54a9a43c        2 weeks ago        13.3kB
ubuntu               latest              3b418d7b466a        4 weeks ago        77.8MB
nginx                1.14-alpine         8a2fb25a19f5        4 years ago        16MB
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$ sudo docker rmi -f fe7edaf8a8dc d0677d8f
6c79 9c7a54a9a43c 3b418d7b466a 8a2fb25a19f5
Untagged: nginx:alpine
Untagged: nginx@sha256:2e776a66a3556f001aba13431b26e448fe8acba277bf93d2ab1a785571a46d90
Deleted: sha256:fe7edaf8a8dcf9af72f49cf0a0219e3ace17667bafc537f0d4a0ab1bd7f10467
Untagged: nginxdocker-image:latest
Deleted: sha256:d0677d8f6c79f68faca64d95a822efbb5512573ad6a1a335003edc0959badc21
Untagged: hello-world:latest
Untagged: hello-world@sha256:fc6cf906cbfa013e80938cdf0bb199fbd8b86d6e3e013783e5a766f50f5dbce0
Deleted: sha256:9c7a54a9a43cca047013b82af109fe963fde787f63f9e016fdc3384500c2823d
Untagged: ubuntu:latest
Untagged: ubuntu@sha256:dfd64a3b4296d8c9b62aa3309984f8620b98d87e47492599ee20739e8eb54fbf
Deleted: sha256:3b418d7b466ac6275a6bfc0c86f8e4422ff6ea0af444a294f82d3bf5173ce74
Untagged: nginx:1.14-alpine
Untagged: nginx@sha256:485b610fefec7ff6c463ced962331a04ed67e3945b9c08d7e53a47f6d108dc7
Deleted: sha256:8a2fb25a19f5dc1528b7a3fabe8b3145ff57fe10e4f1edac6c718a3cf4aa4b73
Deleted: sha256:f68a8bcb9dbd06e0d2750eabf63c45f51734a72831ed650d2349775865d5fc20
Deleted: sha256:cbf2c7789332fe231e8defa490527a7b2c3ae8589997ceee00895f3263f0a8cf
Deleted: sha256:894f3fad7e6ecd7f24e88340a44b7b73663a85c0eb7740e7ade169e9d8491a4c
Deleted: sha256:a464c54f93a9e88fc1d33df1e0e39cca427d60145a360962e8f19a1dbf900da9
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$ sudo docker image ls
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
younis@younis-HP-ProBook-450-G2:~/Sprints_Tasks/DOCKER01/Task01$
```

