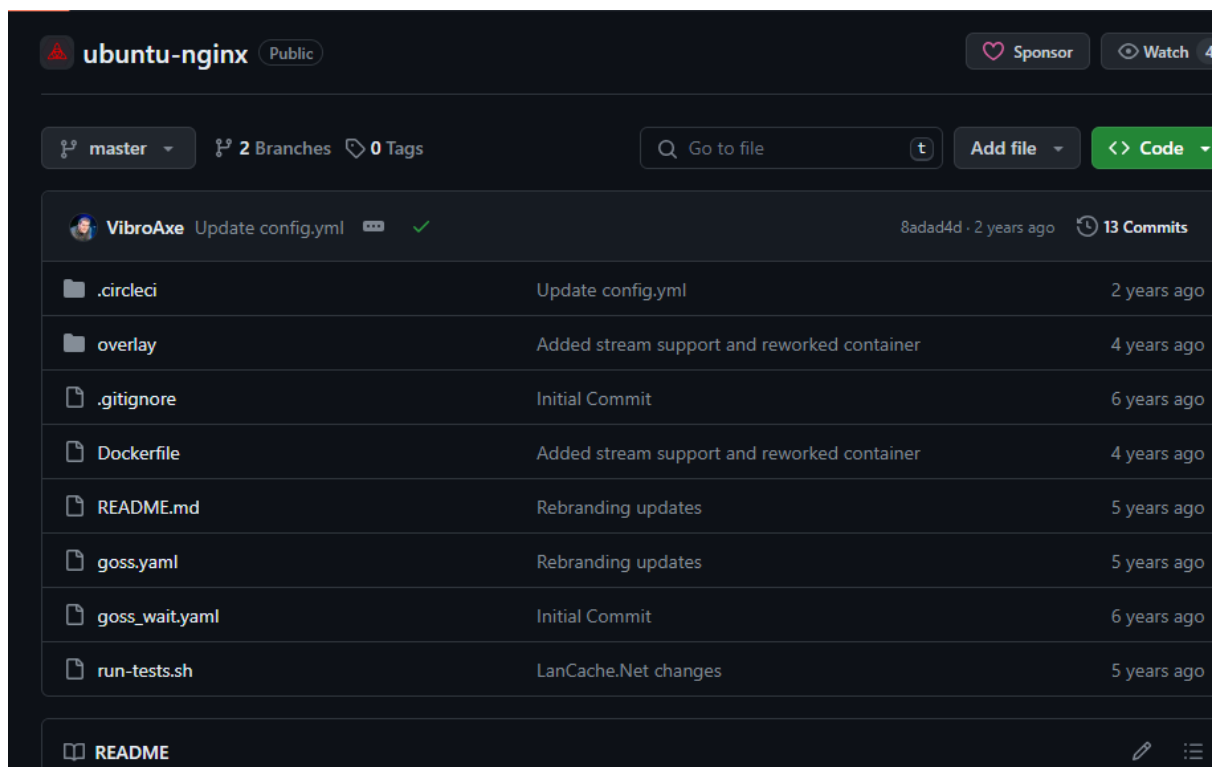


DOCKER ASSIGNMENT 02

- 8. Clone the lancachenet/ubuntu-nginx Git repository locally and build a Docker image from the provided Dockerfile. Be sure to add relevant tags when building the image.**
- 9. After building the image, run a Docker container using the image and check the webpage using the curl command to ensure it's accessible.**
- 10. Launch an Ubuntu container, demonstrate that the escape sequence is functional, and reattach the container after detaching it with the escape sequence. Then, check the container's IP address.**
- 11. Use a Docker command to inspect the hostname and /etc/hosts file of the httpd container.**
- 12. Run a Docker command to inspect a container created with the lancachenet/ubuntu-nginx repository, and monitor the container's resource usage and stats with the TOP command.**
- 13. Start a new Nginx container and review the logs for both Nginx containers.**
- 14. Examine system events, filtering them by date and the last 30 minutes. Additionally, apply two filters simultaneously using name and event.**
- 15. Create a Docker container using the Ubuntu image, assign it a meaningful name, and set the hostname to "cloudethix.com." Stop or kill the container, check its exit code, and examine the container's log for more information.**
- 16. Instantiate and start an Ubuntu container with a random name, then rename it to "Ubuntu01." Launch another container named "Ubuntu02" and check the hostname of both containers. Pause and un-pause the "Ubuntu02" container, and stop, start, and restart the "Ubuntu01" container. Inspect the stats and system events of both containers, then kill and delete them, ensuring that directories created by the containers are removed.**

17. Create a DockerHub account, set up a repository with meaningful name.

8. Clone the lancachenet/ubuntu-nginx Git repository locally and build a Docker image from the provided Dockerfile. Be sure to add relevant tags when building the image.



```
root@FARDIN:/mnt/f/docker# git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /mnt/f/docker/.git/
```

```
root@FARDIN:/mnt/f/docker# git clone git@github.com:lancachenet/ubuntu-nginx.git
Cloning into 'ubuntu-nginx'...
remote: Enumerating objects: 101, done.
remote: Counting objects: 100% (28/28), done.
remote: Compressing objects: 100% (21/21), done.
remote: Total 101 (delta 3), reused 18 (delta 0), pack-reused 73
Receiving objects: 100% (101/101), 19.15 KiB | 272.00 KiB/s, done.
Resolving deltas: 100% (20/20), done.
Updating files: 100% (19/19), done.
root@FARDIN:/mnt/f/docker# ll
total 0
drwxrwxrwx 1 fardin fardin 512 Jan 10 11:44 ./
drwxrwxrwx 1 fardin fardin 512 Jan 10 11:10 ../
drwxrwxrwx 1 fardin fardin 512 Jan 10 11:43 .git/
drwxrwxrwx 1 fardin fardin 512 Jan 10 11:44 ubuntu-nginx/
root@FARDIN:/mnt/f/docker#
```

```
root@FARDIN:/mnt/f/docker/ubuntu-nginx# ll
total 12
drwxrwxrwx 1 fardin fardin 512 Jan 10 11:44 ./
drwxrwxrwx 1 fardin fardin 512 Jan 10 11:44 ../
drwxrwxrwx 1 fardin fardin 512 Jan 10 11:44 .circleci/
drwxrwxrwx 1 fardin fardin 512 Jan 10 11:44 .git/
-rwxrwxrwx 1 fardin fardin 6 Jan 10 11:44 .gitignore*
-rwxrwxrwx 1 fardin fardin 979 Jan 10 11:44 Dockerfile*
-rwxrwxrwx 1 fardin fardin 789 Jan 10 11:44 README.md*
-rwxrwxrwx 1 fardin fardin 292 Jan 10 11:44 goss.yaml*
-rwxrwxrwx 1 fardin fardin 105 Jan 10 11:44 goss_wait.yaml*
drwxrwxrwx 1 fardin fardin 512 Jan 10 11:44 overlay/
-rwxrwxrwx 1 fardin fardin 1047 Jan 10 11:44 run-tests.sh*
root@FARDIN:/mnt/f/docker/ubuntu-nginx#
```

Docker image build

```
root@FARDIN:/mnt/f/docker/ubuntu-nginx# docker build --tag my_test_image .
[+] Building 24.9s (9/9) FINISHED
=> [internal] load .dockerignore                                0.1s
=> => transferring context: 2B                                  0.0s
=> [internal] load build definition from Dockerfile            0.1s
=> => transferring dockerfile: 1.02kB                          0.0s
=> [internal] load metadata for docker.io/lancachenet/ubuntu:latest 24.0s
=> [internal] load build context                                0.7s
=> => transferring context: 7.51kB                              0.7s
=> [1/4] FROM docker.io/lancachenet/ubuntu:latest@sha256:7ece2e2aefb4cc13b895823fa7clee43763a1b15b84659dcb4daae726f757765 0.0s
=> CACHED [2/4] COPY overlay/ /                               0.0s
=> CACHED [3/4] RUN apt-get update && apt-get install -y nginx-full inotify-tools 0.0s
=> CACHED [4/4] RUN chmod 777 /opt/nginx/startnginx.sh && rm /etc/nginx/sites-available/default /etc/nginx/sites-enabled 0.0s
=> exporting to image                                          0.0s
=> => exporting layers                                          0.0s
=> => writing image sha256:0258cf8103572c1554e94c2c2e2f559177e23b5c4173c153b839850699729df1 0.0s
=> => naming to docker.io/library/my_test_image              0.0s
WARNING: buildx: failed to read current commit information with git rev-parse --is-inside-work-tree
root@FARDIN:/mnt/f/docker/ubuntu-nginx#
```

Q9. After building the image, run a Docker container using the image and check the webpage using the curl command to ensure it's accessible.

```
root@FARDIN:/mnt/f/docker/ubuntu-nginx# docker image ls
REPOSITORY          TAG             IMAGE ID        CREATED         SIZE
my_test_image        latest          0258cf810357   31 minutes ago  584MB
ubuntu               latest          174c8c134b2a   4 weeks ago    77.9MB
nginx                latest          d453dd892d93   2 months ago   187MB
root@FARDIN:/mnt/f/docker/ubuntu-nginx#
```

```
root@FARDIN:/mnt/f/docker/ubuntu-nginx# docker container run -itd -p 8082:80 --name my_test_container_02 my_test_image
89fa16945db9869c07ee4512fec3677ee5b38ed0d1d0e72931b99f5be0b09d41
root@FARDIN:/mnt/f/docker/ubuntu-nginx# docker container ls
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS                               NAME
89fa16945db9   my_test_image  "/bin/bash -e /init/..." 47 seconds ago Up 46 seconds 0.0.0.0:8082->80/tcp, :::8082->80/tcp my_test_container_02
```

```
172.23.75.220:8082 dev echo proto kernel scope link src 172.23.75.220
root@FARDIN:/mnt/f/docker/ubuntu-nginx# curl 172.23.75.220:8082
Welcome to the lancachenet/ubuntu-nginx docker container
root@FARDIN:/mnt/f/docker/ubuntu-nginx#
```

```
root@FARDIN:/mnt/f/docker/ubuntu-nginx# curl http://172.17.0.3
Welcome to the lancachenet/ubuntu-nginx docker container
root@FARDIN:/mnt/f/docker/ubuntu-nginx#
```

Q10. Launch an Ubuntu container, demonstrate that the escape sequence is functional, and reattach the container after detaching it with the escape sequence. Then, check the container's IP address.

```
nervous_napier
root@FARDIN:/mnt/f/docker/ubuntu-nginx# docker container run -it ubuntu
root@e28bc4842cc2:/# exit
exit
```

```
exit
root@FARDIN:/mnt/f/docker/ubuntu-nginx# docker container ls -a
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS              PORTS
e28bc4842cc2   ubuntu        "/bin/bash"             About a minute ago    Exited (0) 13 seconds ago
beautiful_mendel
89fa16945db9   my_test_image  "/bin/bash -e /init/..." 15 minutes ago      Up 15 minutes       0.0.0.0:8082->80/tcp, :
::8082->80/tcp    my_test_container_02
```

```
nervous_napier
root@FARDIN:/mnt/f/docker/ubuntu-nginx# docker container run -itd ubuntu
deda798a800960e08409eb65dc05b70816811ad0ca2802754682f542711ea4f6
root@FARDIN:/mnt/f/docker/ubuntu-nginx# docker container ls -a
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS              PORTS
deda798a8009   ubuntu        "/bin/bash"             22 seconds ago    Up 21 seconds
exciting_aryabhata
```

```
root@FARDIN:/mnt/f/docker/ubuntu-nginx# docker container attach deda798a8009
root@deda798a8009:/# █
```

```
est_container_02
root@FARDIN:/mnt/f/docker/ubuntu-nginx# docker container exec -it 511ea74c45f3 hostname -i
172.17.0.2
```

Q11. Use a Docker command to inspect the hostname and /etc/hosts file of the httpd container.

```
Execute a command in a running container
root@FARDIN:/mnt/f/docker/ubuntu-nginx# docker container exec -it my_httpd_container hostname
89d1aa5e4731
root@FARDIN:/mnt/f/docker/ubuntu-nginx# docker container exec -it my_httpd_container hostname -i
172.17.0.2
root@FARDIN:/mnt/f/docker/ubuntu-nginx# docker container exec -it my_httpd_container cat /etc/hosts
127.0.0.1        localhost
::1             localhost ip6-localhost ip6-loopback
fe00::0          ip6-localnet
ff00::0          ip6-mcastprefix
ff02::1          ip6-allnodes
ff02::2          ip6-allrouters
172.17.0.2       89d1aa5e4731
root@FARDIN:/mnt/f/docker/ubuntu-nginx#
```

Q12. Run a Docker command to inspect a container created with the lancachenet/ubuntu-nginx repository, and monitor the container's resource usage and stats with the TOP command.

```
5, -size          Display total file sizes
root@FARDIN:/mnt/f/docker/ubuntu-nginx# docker container inspect my_test_container_02
[
  {
    "Id": "89fa16945db9869c07ee4512fec3677ee5b38ed0d1d0e72931b99f5be0b09d41",
    "Created": "2024-01-10T06:28:10.654639273Z",
    "Path": "/bin/bash",
    "Args": [
      "-e",
      "/init/entrypoint",
      "/init/supervisord"
    ],
    "State": {
      "Status": "running",
      "Running": true,
      "Paused": false,
      "Restarting": false,
      "OOMKilled": false,
      "Dead": false,
      "Pid": 6059,
      "ExitCode": 0,
      "Error": "",
      "StartedAt": "2024-01-10T06:28:11.195987792Z",
      "FinishedAt": "0001-01-01T00:00:00Z"
    }
  }
]
```

Docker container stats

```
root@FARDIN:/mnt/f/docker/ubuntu-nginx# docker container stats my_test_container_02
CONTAINER ID   NAME                CPU %      MEM USAGE / LIMIT   MEM %      NET I/O      BLOCK I/O   PIDS
89fa16945db9   my_test_container_02 0.02%     21.07MiB / 3.704GiB 0.56%     2.58kB / 1.53kB 0B / 0B     7
CONTAINER ID   NAME                CPU %      MEM USAGE / LIMIT   MEM %      NET I/O      BLOCK I/O   PIDS
89fa16945db9   my_test_container_02 0.02%     21.07MiB / 3.704GiB 0.56%     2.58kB / 1.53kB 0B / 0B     7
CONTAINER ID   NAME                CPU %      MEM USAGE / LIMIT   MEM %      NET I/O      BLOCK I/O   PIDS
89fa16945db9   my_test_container_02 0.02%     21.07MiB / 3.704GiB 0.56%     2.58kB / 1.53kB 0B / 0B     7
CONTAINER ID   NAME                CPU %      MEM USAGE / LIMIT   MEM %      NET I/O      BLOCK I/O   PIDS
89fa16945db9   my_test_container_02 0.02%     21.07MiB / 3.704GiB 0.56%     2.58kB / 1.53kB 0B / 0B     7
CONTAINER ID   NAME                CPU %      MEM USAGE / LIMIT   MEM %      NET I/O      BLOCK I/O   PIDS
89fa16945db9   my_test_container_02 0.02%     21.07MiB / 3.704GiB 0.56%     2.58kB / 1.53kB 0B / 0B     7
CONTAINER ID   NAME                CPU %      MEM USAGE / LIMIT   MEM %      NET I/O      BLOCK I/O   PIDS
89fa16945db9   my_test_container_02 0.02%     21.07MiB / 3.704GiB 0.56%     2.58kB / 1.53kB 0B / 0B     7
CONTAINER ID   NAME                CPU %      MEM USAGE / LIMIT   MEM %      NET I/O      BLOCK I/O   PIDS
89fa16945db9   my_test_container_02 0.03%     21.07MiB / 3.704GiB 0.56%     2.58kB / 1.53kB 0B / 0B     7
CONTAINER ID   NAME                CPU %      MEM USAGE / LIMIT   MEM %      NET I/O      BLOCK I/O   PIDS
89fa16945db9   my_test_container_02 0.03%     21.07MiB / 3.704GiB 0.56%     2.58kB / 1.53kB 0B / 0B     7
CONTAINER ID   NAME                CPU %      MEM USAGE / LIMIT   MEM %      NET I/O      BLOCK I/O   PIDS
89fa16945db9   my_test_container_02 0.03%     21.07MiB / 3.704GiB 0.56%     2.58kB / 1.53kB 0B / 0B     7
CONTAINER ID   NAME                CPU %      MEM USAGE / LIMIT   MEM %      NET I/O      BLOCK I/O   PIDS
89fa16945db9   my_test_container_02 0.03%     21.07MiB / 3.704GiB 0.56%     2.58kB / 1.53kB 0B / 0B     7
CONTAINER ID   NAME                CPU %      MEM USAGE / LIMIT   MEM %      NET I/O      BLOCK I/O   PIDS
89fa16945db9   my_test_container_02 0.02%     21.07MiB / 3.704GiB 0.56%     2.58kB / 1.53kB 0B / 0B     7
CONTAINER ID   NAME                CPU %      MEM USAGE / LIMIT   MEM %      NET I/O      BLOCK I/O   PIDS
89fa16945db9   my_test_container_02 0.03%     21.07MiB / 3.704GiB 0.56%     2.58kB / 1.53kB 0B / 0B     7
CONTAINER ID   NAME                CPU %      MEM USAGE / LIMIT   MEM %      NET I/O      BLOCK I/O   PIDS
89fa16945db9   my_test_container_02 0.02%     21.07MiB / 3.704GiB 0.56%     2.58kB / 1.53kB 0B / 0B     7
CONTAINER ID   NAME                CPU %      MEM USAGE / LIMIT   MEM %      NET I/O      BLOCK I/O   PIDS
89fa16945db9   my_test_container_02 0.07%     21.07MiB / 3.704GiB 0.56%     2.58kB / 1.53kB 0B / 0B     7
CONTAINER ID   NAME                CPU %      MEM USAGE / LIMIT   MEM %      NET I/O      BLOCK I/O   PIDS
89fa16945db9   my_test_container_02 0.07%     21.07MiB / 3.704GiB 0.56%     2.58kB / 1.53kB 0B / 0B     7
CONTAINER ID   NAME                CPU %      MEM USAGE / LIMIT   MEM %      NET I/O      BLOCK I/O   PIDS
```

Docker container top

```
root@FARDIN:/mnt/f/docker/ubuntu-nginx# docker container top my_test_container_02
UID          PID          PPID         C            STIME        TTY          TIME
      CMD
root         6059         6038         0            11:58        pts/0        00:00:01
      /usr/bin/python3 /usr/local/bin/supervisord -n -c /etc/supervisor/supervisord.conf -e WARN
root         6093         6059         0            11:58        pts/0        00:00:00
      /bin/bash /opt/nginx/startnginx.sh
root         6094         6093         0            11:58        pts/0        00:00:00
      nginx: master process /usr/sbin/nginx -g daemon off;
www-data    6095         6094         0            11:58        pts/0        00:00:00
      nginx: worker process
www-data    6096         6094         0            11:58        pts/0        00:00:00
      nginx: worker process
www-data    6097         6094         0            11:58        pts/0        00:00:00
      nginx: worker process
www-data    6098         6094         0            11:58        pts/0        00:00:00
      nginx: worker process
root@FARDIN:/mnt/f/docker/ubuntu-nginx#
```

Q13.Start a new Nginx container and review the logs for both Nginx containers.

```
root@FARDIN:~/docker# docker container logs ac13aal3a86f
/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: Sourcing /docker-entrypoint.d/15-local-resolvers.envsh
/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
2024/01/10 07:30:37 [notice] 1#1: using the "epoll" event method
2024/01/10 07:30:37 [notice] 1#1: nginx/1.25.3
2024/01/10 07:30:37 [notice] 1#1: built by gcc 12.2.0 (Debian 12.2.0-14)
2024/01/10 07:30:37 [notice] 1#1: OS: Linux 5.15.90.1-microsoft-standard-WSL2
2024/01/10 07:30:37 [notice] 1#1: getrlimit(RLIMIT_NOFILE): 1048576:1048576
2024/01/10 07:30:37 [notice] 1#1: start worker processes
2024/01/10 07:30:37 [notice] 1#1: start worker process 29
2024/01/10 07:30:37 [notice] 1#1: start worker process 30
2024/01/10 07:30:37 [notice] 1#1: start worker process 31
2024/01/10 07:30:37 [notice] 1#1: start worker process 32
```


Q14 . Examine system events, filtering them by date and the last 30 minutes. Additionally, apply two filters simultaneously using name and event.

System events Filtering 30 minutes

```
root@FARDIN:/mnt/f/docker/ubuntu-nginx# docker system events --since 30m
2024-01-10T12:57:52.255949819+05:30 container top 89fa16945db9869c07ee4512fec3677ee5b38ed0d1d0e72931b99f5be0b09d41 (image=my_test_image, name=my_test_container_02, org.opencontainers.image.ref.name=ubuntu, org.opencontainers.image.version=18.04)
2024-01-10T13:00:36.684037746+05:30 container create ac13aal3a86fff6f087ddee937e01ee75a9bd69985d23dec5f7e674febaaf47e (image=nginx, maintainer=NGINX Docker Maintainers <docker-maint@nginx.com>, name=flamboyant_nightingale)
2024-01-10T13:00:36.724159832+05:30 network connect d52eclbdb4f57e96f2861f2dcca3b180759c6ed8adf6f739a892914c44af8b8b (container=ac13aal3a86fff6f087ddee937e01ee75a9bd69985d23dec5f7e674febaaf47e, name=bridge, type=bridge)
2024-01-10T13:00:37.049137178+05:30 container start ac13aal3a86fff6f087ddee937e01ee75a9bd69985d23dec5f7e674febaaf47e (image=nginx, maintainer=NGINX Docker Maintainers <docker-maint@nginx.com>, name=flamboyant_nightingale)
2024-01-10T13:05:33.818443779+05:30 container exec_create: logs ac13aal3a86fff6f087ddee937e01ee75a9bd69985d23dec5f7e674febaaf47e (execID=912d221227ac8b6f827a37bf301b81781c2632bf45acb3e2ecd69a72828b933d, image=nginx, maintainer=NGINX Docker Maintainers <docker-maint@nginx.com>, name=flamboyant_nightingale)
2024-01-10T13:05:33.819325009+05:30 container exec_start: logs ac13aal3a86fff6f087ddee937e01ee75a9bd69985d23dec5f7e674febaaf47e (execID=912d221227ac8b6f827a37bf301b81781c2632bf45acb3e2ecd69a72828b933d, image=nginx, maintainer=NGINX Docker Maintainers <docker-maint@nginx.com>, name=flamboyant_nightingale)
2024-01-10T13:05:58.990685035+05:30 container exec_create: /bin/bash ac13aal3a86fff6f087ddee937e01ee75a9bd69985d23dec5f7e674febaaf47e (execID=c77a35d5e3c44da5812db8cfbcf926a17e283a0aac400cf747e26a9d8f427eee, image=nginx, maintainer=NGINX Docker Maintainers <docker-maint@nginx.com>, name=flamboyant_nightingale)
2024-01-10T13:05:58.991198768+05:30 container exec_start: /bin/bash ac13aal3a86fff6f087ddee937e01ee75a9bd69985d23dec5f7e674febaaf47e (execID=c77a35d5e3c44da5812db8cfbcf926a17e283a0aac400cf747e26a9d8f427eee, image=nginx, maintainer=NGINX Docker Maintainers <docker-maint@nginx.com>, name=flamboyant_nightingale)
2024-01-10T13:09:02.566013983+05:30 container exec_die ac13aal3a86fff6f087ddee937e01ee75a9bd69985d23dec5f7e674febaaf47e (execID=c77a35d5e3c44da5812db8cfbcf926a17e283a0aac400cf747e26a9d8f427eee, exitCode=0, image=nginx, maintainer=NGINX Docker Maintainers <docker-maint@nginx.com>, name=flamboyant_nightingale)
```

System events Filtering by date

```
root@FARDIN:/mnt/f/docker/ubuntu-nginx# docker system events --since '2024-01-05'
2024-01-10T11:14:29.449584995+05:30 container destroy 9a6df63238bf1ea435989a46aa7c63e2db5e4c91d812c3ffb57dbb16f999eca6 (image=esmail1055/esmail-image-5, maintainer=NGINX Docker Maintainers <docker-maint@nginx.com>, name=vigilant_wozniak)
2024-01-10T11:14:36.157557336+05:30 image untag sha256:b3861878e1d7516975070c5af23d897e263caf6fa679c079341e717f5ff00595 (maintainer=NGINX Docker Maintainers <docker-maint@nginx.com>, name=sha256:b3861878e1d7516975070c5af23d897e263caf6fa679c079341e717f5ff00595)
2024-01-10T11:14:36.170831505+05:30 image delete sha256:b3861878e1d7516975070c5af23d897e263caf6fa679c079341e717f5ff00595 (name=sha256:b3861878e1d7516975070c5af23d897e263caf6fa679c079341e717f5ff00595)
2024-01-10T11:19:53.016871524+05:30 image tag sha256:0258cf8103572c1554e94c2c2e2f559177e23b5c4173c153b839850699729df1 (name=my_test_image, org.opencontainers.image.ref.name=ubuntu, org.opencontainers.image.version=18.04)
2024-01-10T11:23:36.188354684+05:30 container create ca6d35acad1275b9a7f3faf99eeecb41c7193a5ba3874d6016402989ef93eaa72 (image=my_test_image, name=mystifying_villani, org.opencontainers.image.ref.name=ubuntu, org.opencontainers.image.version=18.04)
2024-01-10T11:23:36.260073613+05:30 network connect d52eclbdb4f57e96f2861f2dcca3b180759c6ed8adf6f739a892914c44af8b8b (container=ca6d35acad1275b9a7f3faf99eeecb41c7193a5ba3874d6016402989ef93eaa72, name=bridge, type=bridge)
2024-01-10T11:23:36.614762382+05:30 container start ca6d35acad1275b9a7f3faf99eeecb41c7193a5ba3874d6016402989ef93eaa72 (image=my_test_image, name=mystifying_villani, org.opencontainers.image.ref.name=ubuntu, org.opencontainers.image.version=18.04)
2024-01-10T11:23:37.031051201+05:30 network disconnect d52eclbdb4f57e96f2861f2dcca3b180759c6ed8adf6f739a892914c44af8b8b (container=ca6d35acad1275b9a7f3faf99eeecb41c7193a5ba3874d6016402989ef93eaa72, name=bridge, type=bridge)
2024-01-10T11:23:37.055890965+05:30 container die ca6d35acad1275b9a7f3faf99eeecb41c7193a5ba3874d6016402989ef93eaa72 (execDuration=0, exitCode=2, image=my_test_image, name=mystifying_villani, org.opencontainers.image.ref.name=ubuntu, org.opencontainers.image.version=18.04)
```

Q15.Create a Docker container using the Ubuntu image, assign it a meaningful name, and set the hostname to "cloudethix.com." Stop or kill the container, check its exit code, and examine the container's log for more information.

```
root@FARDIN:~/docker# docker container run -itd --name my_ubuntu_container --hostname cloudethix.com ubuntu
bc7f9ce4c25d02dbda91476eaa919c23f27f4be0cc83a42a58cc6e646cd668a
root@FARDIN:~/docker# docker container exec my_ubuntu_container hostname
cloudethix.com
root@FARDIN:~/docker#
```

```
my_test_container_02
root@FARDIN:~/docker# docker container ls -a
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS        PORTS
NAMES
bc7f9ce4c25d   ubuntu   "/bin/bash"             4 minutes ago   Exited (137) 2 minutes ago
my_ubuntu_container
```

Q16.Instantiate and start an Ubuntu container with a random name, then rename it to "Ubuntu01." Launch another container named "Ubuntu02" and check the hostname of both containers. Pause and un-pause the "Ubuntu02" container, and stop, start, and restart the "Ubuntu01" container. Inspect the stats and system events of both containers, then kill and delete them, ensuring that directories created by the containers are removed.

```
root@cloudethix:~# root@FARDIN:~/docker# docker container start my_ubuntu_container
my_ubuntu_container
root@FARDIN:~/docker# docker container ls
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS        PORTS
NAMES
ubuntu        "/bin/bash"             21 minutes ago   Up 3 minutes
ac13aa13a86f   nginx     "/docker-entrypoint..." 2 hours ago    Up 2 hours    80/tcp
le
89d1aa5e4731   httpd     "httpd-foreground"       2 hours ago    Up 2 hours    80/tcp
89fa16945db9   my_test_image "/bin/bash -e /init/_..." 3 hours ago    Up 3 hours    0.0.0.0:8082->80/tcp, :::8082->80/tcp
my_test_container_02
```

```
root@FARDIN:~/docker# docker container rename my_ubuntu_container Ubuntu01
root@FARDIN:~/docker# docker container ls
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS        PORTS
NAMES
bc7f9ce4c25d   ubuntu   "/bin/bash"             23 minutes ago   Up 6 minutes
Ubuntu01
```

```
root@FARDIN:~/docker# docker container exec -it Ubuntu01 hostname
cloudethix.com
root@FARDIN:~/docker# docker container exec -it Ubuntu02 hostname
44bda4d9a88d
root@FARDIN:~/docker#
```

```
root@FARDIN:~# docker container ls
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS        PORTS        NAMES
5ba7179b630f   ubuntu   "/bin/bash"             10 minutes ago   Up 10 minutes (Paused)
ff2264c714fa   ubuntu   "/bin/bash"             11 minutes ago   Up 11 minutes
Ubuntu02
Ubuntu01
root@FARDIN:~#
```

```
root@FARDIN:~# docker container ls
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
5ba7179b630f	ubuntu	"/bin/bash"	13 minutes ago	Up 13 minutes		Ubuntu02
ff2264c714fa	ubuntu	"/bin/bash"	14 minutes ago	Up 14 minutes		Ubuntu01

```
root@FARDIN:~# docker container stop Ubuntu01
root@FARDIN:~# docker container ls
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
5ba7179b630f	ubuntu	"/bin/bash"	15 minutes ago	Up 15 minutes		Ubuntu02

```
root@FARDIN:~# docker container start Ubuntu01
root@FARDIN:~# docker container ls
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
5ba7179b630f	ubuntu	"/bin/bash"	15 minutes ago	Up 15 minutes		Ubuntu02
ff2264c714fa	ubuntu	"/bin/bash"	16 minutes ago	Up 3 seconds		Ubuntu01

```
root@FARDIN:~# docker container restart Ubuntu01
root@FARDIN:~# docker container ls
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
5ba7179b630f	ubuntu	"/bin/bash"	16 minutes ago	Up 16 minutes		Ubuntu02
ff2264c714fa	ubuntu	"/bin/bash"	16 minutes ago	Up 3 seconds		Ubuntu01

```
root@FARDIN:~#
```

```
root@FARDIN:~# docker system events -f name=Ubuntu01
^C
```


```
root@FARDIN:~# docker container stop Ubuntu01
root@FARDIN:~# docker container ls
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
5ba7179b630f	ubuntu	"/bin/bash"	22 minutes ago	Up 21 minutes		Ubuntu02


```
root@FARDIN:~# docker container stop Ubuntu02
root@FARDIN:~# docker container rm Ubuntu02
root@FARDIN:~# docker container rm Ubuntu01
```


```
root@FARDIN:/var/lib/docker/containers# ll
total 36
drwx--x--- 9 root root 4096 Jan 10 16:17 ./
drwx--x--- 12 root root 4096 Jan 10 15:51 ../
drwx--x--- 4 root root 4096 Jan 10 15:51 2cc504b1fd8314a94558a9e6230c763b201f61fa687aad553287bcf0545443ff/
drwx--x--- 4 root root 4096 Jan 10 15:51 89d1aa5e4731cd85c7f931cc8dda328c475ee1b528b38aaf231c88ec4c7ea126/
drwx--x--- 4 root root 4096 Jan 10 15:51 89fa16945db9869c07ee4512fec3677ee5b38ed0d1d0e72931b99f5be0b09d41/
drwx--x--- 4 root root 4096 Jan 10 15:51 94b7610083acb24ec2f9b7b0090da6a37d44e8181719eb69be58d8ccf3849f4f/
drwx--x--- 4 root root 4096 Jan 10 15:51 add8fa2d1010f137b976181ed6a3cbafa15a41f3e59c0ab224ea84498190eb97/
drwx--x--- 4 root root 4096 Jan 10 15:51 cb1366e4a819734433c9f2d0eb04e5090ba17953df7658208791dad61b399621/
drwx--x--- 4 root root 4096 Jan 10 15:51 cc4193d5a39d6b35ab7f9db86deaf5814f5f2332467ee97748323055ab74ba214/
root@FARDIN:/var/lib/docker/containers#
```

Q17. Create a DockerHub account, set up a repository with meaningful name.

 fardin31 / fardin_docker_repo

Description

docker work 

 Last pushed: a few seconds ago

Docker commands

To push a new tag to this repository:

`docker push fardin31/fardin_docker_repo:tagname`

[Public View](#)