Experiment-11

Aim-Implement Docker Container Restart Policy

- Here it is a special container which outputs a message and then exits with code 1 to simulate a crash. Launching an instance using the following command.

```
$ docker run -d --name restart-default scrapbook/docker-restart-example
5379f914ea259c7d2c5d80b0637a88549018bfafb215b4f52989340d67875e0e
```

- List all the containers, including stopped, to see the container has crashed.

```
$ docker ps -a
CONTAINER ID      IMAGE                        COMMAND              CREATED        STATUS
  PORTS             NAMES
5379f914ea25      scrapbook/docker-restart-example  "/bin/sh -c ./launch…"  3 seconds ago   Exited (1) 1 second ago
                   restart-default
```

- The logs will output a message, which indicates information to diagnose the issue.

```
$ docker logs restart-default
Sun May 2 16:56:52 UTC 2021 Booting up...
```

- Docker will restart the container three times before stopping, in the case below.

```
$ docker run -d --name restart-3 --restart=on-failure:3 scrapbook/docker-restart-example
d619d9568e1382d5d44326b21f3bb509dd2838abf9bccdadb9c2fc8bcb7c5912
$ docker logs restart-3
Sun May 2 16:57:19 UTC 2021 Booting up...
Sun May 2 16:57:20 UTC 2021 Booting up...
Sun May 2 16:57:22 UTC 2021 Booting up...
```

- Using the always flag to automatically restart the container when it crashes

```
$ docker run -d --name restart-always --restart=always scrapbook/docker-restart-example
66120d23b14fd7b67dddadaea0a0d4bfbd875f4322bff28fcae5dddc8615ffad
$ docker logs restart-always
Sun May 2 16:57:30 UTC 2021 Booting up...
Sun May 2 16:57:31 UTC 2021 Booting up...
```

There are **four** types of Restart Policies in **docker**, they are:

- ➢ **no**: The following is by default

- ➢ **always**: In the following if the container stops it is restarted as soon as the docker daemon reloads.

- ➢ **unless-stopped:** In the following the container will not restart if it is stopped manually or otherwise even after the docker daemon reloads.

- ➢ **on-failure:** In the following the container will restart if it exits because of an error.

We give the restart policy to the container while creating it using the **–restart** option.