Documentation:

I Installed docker, the application required to containerise different environments.

Then I randomly searched 3 different environments, the nginx, apache and the alpine and downloaded them .

Hearing all these terms for the first time .. the maximum i could understand until this point is that, there is this concept of containerisation which basically segregates the environments required for different applications to run into different containers.

which is especially important when we want to transfer the application from one computer to another .

for example (although a vague one) if I have python and java and c++ running on my computer i will have the environment of my computer set up in a way to accommodate all the requirements of all three. but if I had to send the part required to run python to another machine .. I had to send the entire set up , couldn't segregate it. but if i had different container for python and for java and c++ i could just sent the container of python to the other machine and my work is done.

Now coming back to the process, when i have these three environments running on my computer....i have to use certain commands to see the details of the docker.

first one : docker ps -a it gives the details like id name status etc. of all the containers if the docker whether running or exited.

second one : docker start name/id this command can start the docker container.

third one: docker stop name/id this command can stop the container of the docker.

now comes the big problem .. we want a code such that it alerts us when docker changes their state. but for that we need our code to read the output of the command prompt. only then can it detect any change in it .

so for that I used the subprocess module and the check\_output method stored the command in a variable named output then it is decoded for the special symbols like that of a new line to be executed properly and it is in a proper readable string format.

Then I defined a function to send an alert email as and when it was called.

Then through a loop I compared the states of the running dockers and if there was a change found then it would sent an alert email .