

Ex 5 :

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Activities Terminal Nov 6 14:37 itlab@IT: ~/Desktop/Webapp
itlab@IT:~/Desktop/Webapp$ sudo apt-get install nginx
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  libnginx-mod-http-image-filter libnginx-mod-http-xslt-filter
  libnginx-mod-mail libnginx-mod-stream nginx-common nginx-core
Suggested packages:
  fcgiwrap nginx-doc
The following NEW packages will be installed:
  libnginx-mod-http-image-filter libnginx-mod-http-xslt-filter
  libnginx-mod-mail libnginx-mod-stream nginx nginx-common nginx-core
0 upgraded, 7 newly installed, 0 to remove and 332 not upgraded.
Need to get 604 kB of archives.
After this operation, 2,141 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 nginx-common all 1.18.0-0ubuntu1.6 [37.7 kB]
Get:2 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 libnginx-mod-http-image-filter amd64 1.18.0-0ubuntu1.6 [14.8 kB]
Get:3 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 libnginx-mod-http-xslt-filter amd64 1.18.0-0ubuntu1.6 [13.0 kB]
Get:4 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 libnginx-mod-mail amd64 1.18.0-0ubuntu1.6 [42.8 kB]
Get:5 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 libnginx-mod-stream amd64 1.18.0-0ubuntu1.6 [67.2 kB]
Get:6 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 nginx-core amd64 1.18.0-0ubuntu1.6 [425 kB]
Get:7 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 nginx all 1.18.0-0ubuntu1.6 [3,616 B]
Fetched 604 kB in 4s (144 kB/s)
Preconfiguring packages ...
Selecting previously unselected package nginx-common.
```

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Activities Terminal Nov 6 14:38 itlab@IT: ~/Desktop/Webapp
itlab@IT:~/Desktop/Webapp$ sudo apt-get install apache2-utils
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  libapr1 libaprutil1
The following NEW packages will be installed:
  apache2-utils libapr1 libaprutil1
0 upgraded, 3 newly installed, 0 to remove and 332 not upgraded.
Need to get 261 kB of archives.
After this operation, 972 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 libapr1 amd64 1.6.5-1ubuntu1.1 [91.5 kB]
Get:2 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 libaprutil1 amd64 1.6.1-4ubuntu2.2 [85.1 kB]
Get:3 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 apache2-utils amd64 2.4.41-4ubuntu3.21 [84.7 kB]
Fetched 261 kB in 2s (155 kB/s)
Selecting previously unselected package libapr1:amd64.
(Reading database ... 203310 files and directories currently installed.)
Preparing to unpack .../libapr1_1.6.5-1ubuntu1.1_amd64.deb ...
Unpacking libapr1:amd64 (1.6.5-1ubuntu1.1) ...
Selecting previously unselected package libaprutil1:amd64.
Preparing to unpack .../libaprutil1_1.6.1-4ubuntu2.2_amd64.deb ...
Unpacking libaprutil1:amd64 (1.6.1-4ubuntu2.2) ...
Selecting previously unselected package apache2-utils.
Preparing to unpack .../apache2-utils_2.4.41-4ubuntu3.21_amd64.deb ...
Unpacking apache2-utils (2.4.41-4ubuntu3.21) ...
Setting up libapr1:amd64 (1.6.5-1ubuntu1.1) ...
Setting up libaprutil1:amd64 (1.6.1-4ubuntu2.2) ...
Setting up apache2-utils (2.4.41-4ubuntu3.21) ...
```

```
Activities Terminal Nov 6 14:38 itlab@IT: ~/Desktop/Webapp

See 'docker run --help'.
itlab@IT:~/Desktop/Webapp$ docker run -d -p 5001:3000 flask-webapp
2caf0c19565d952c1860c873e977cb6f4f869976a342ba760751f0e218c5bcef
itlab@IT:~/Desktop/Webapp$ docker run -d -p 5002:3000 flask-webapp
4146ccb85a20e40a9c98b59f8358949f47e84dcdee8228e87e0a824089e21e7
itlab@IT:~/Desktop/Webapp$ docker run -d -p 5003:3000 flask-webapp
1eef6fee2fed4d3af19547aa95a4f98f19650036990b944c1c6bf22a04cbaa00
itlab@IT:~/Desktop/Webapp$ sudo systemctl restart nginx
itlab@IT:~/Desktop/Webapp$ ab -n 1000 -c 100 http://localhost:5000/
This is ApacheBench, Version 2.3 <$Revision: 1843412 $>
Copyright 1996 Adam Twiss, Zeus Technology Ltd, http://www.zeustech.net/
Licensed to The Apache Software Foundation, http://www.apache.org/

Benchmarking localhost (be patient)
Completed 100 requests
Completed 200 requests
Completed 300 requests
Completed 400 requests
Completed 500 requests
Completed 600 requests
Completed 700 requests
Completed 800 requests
Completed 900 requests
Completed 1000 requests
Finished 1000 requests

Server Software: Werkzeug/2.2.3
Server Hostname: localhost
Server Port: 5000
```

```
Activities Visual Studio Code Nov 6 14:38 nginx.conf - Webapp - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER WEBAPP
  app.py
  Dockerfile
  requirements.txt

etc > nginx > nginx.conf
1 # user nginx user;
2 # worker_processes auto;
3 # pid /var/run/nginx.pid;
4 include /etc/nginx/modules-enabled/*.conf;
5
6 events {
7     worker_connections 768;
8     # multi_accept on;
9 }
10
11 http {
12
13     upstream flaskapp {
14         server localhost:5001;
15         server localhost:5002;
16         server localhost:5003;
17     }
18
19     server {
20         listen 80;
21         location / {
22             proxy_pass http://flaskapp;
23         }
24     }
25
26     ##
27     # Basic Settings
28     ##
29
30     sendfile on;
31     tcp_nopush on;
32     tcp_nodelay on;
33     keepalive_timeout 65;
34     types_hash_max_size 2048;
35     # server_tokens off;
```