

# Requirements of docker

کامند های مورد نیاز  
لینوکس در داکر:

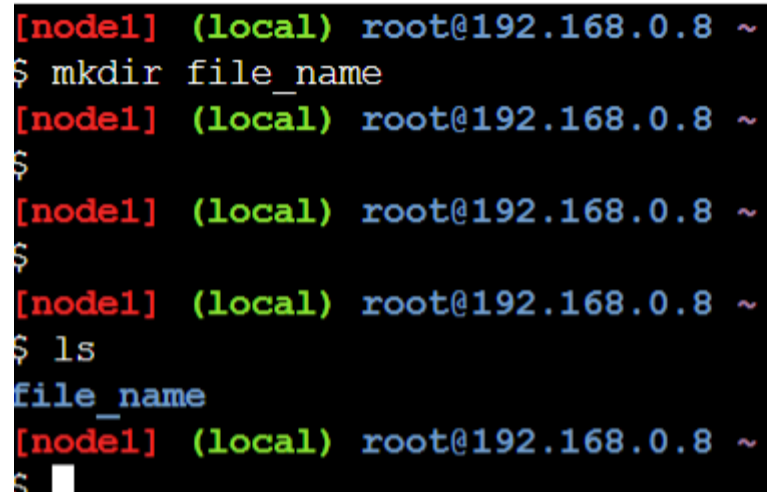
۱. باز کردن یک فایل و یا ایجاد آن در صورت عدم وجود و آماده برای ویرایش:

## فایل با کلید اینتر ایجاد میشود:

بعد از نوشتن محتوا با کلید **esc** و سپس **wq:** محتوا داخل فایل نوشته و از فایل خارج میشود:

```
[node1] (local) root@192.168.0.13 ~  
$ vim file name
```


[illegible]



A terminal window with a black background and colored text. The prompt is [node1] (local) root@192.168.0.8 ~. The user enters \$ mkdir file\_name. The prompt repeats. The user enters \$. The prompt repeats. The user enters \$. The prompt repeats. The user enters \$ ls. The output is file\_name. The prompt repeats. The user enters \$.

```
[node1] (local) root@192.168.0.8 ~  
$ mkdir file_name  
[node1] (local) root@192.168.0.8 ~  
$  
[node1] (local) root@192.168.0.8 ~  
$  
[node1] (local) root@192.168.0.8 ~  
$ ls  
file_name  
[node1] (local) root@192.168.0.8 ~  
$
```

۲. ایجاد دایرکتوری:

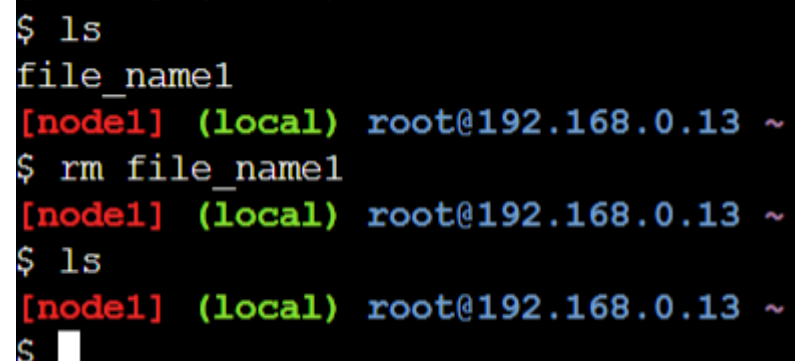


```
[node1] (local) root@192.168.0.8 ~  
$ touch my_file.txt  
[node1] (local) root@192.168.0.8 ~  
$ ls  
file_name  my_file.txt  
[node1] (local) root@192.168.0.8 ~  
$
```

۳. ایجاد فایل:

```
[node1] (local) root@192.168.0.13 ~  
$ vim file_name  
[node1] (local) root@192.168.0.13 ~  
→ $ mv file_name file_name1  
[node1] (local) root@192.168.0.13 ~  
$ ls  
file_name1  
[node1] (local) root@192.168.0.13 ~  
$ █
```

۳. تغییر نام فایل :



A terminal window with a black background and white text. The text shows a sequence of commands and their outputs. An arrow points to the 'rm' command. The prompt is '\$'.

```
$ ls
file_name1
[node1] (local) root@192.168.0.13 ~
→ $ rm file_name1
[node1] (local) root@192.168.0.13 ~
$ ls
[node1] (local) root@192.168.0.13 ~
$
```

۴. پاک کردن فایل:

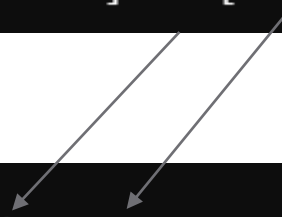
گامند هفای مهم در داکر



# ۱. Pull کردن image در داکر:

```
docker pull [OPTIONS] NAME[:TAG|@DIGEST]
```

```
docker pull python:3.12
```




## ۲. مشاهده image های pull شده:

```
$ docker pull python:3.12
3.12: Pulling from library/python
fdf894e782a2: Pull complete
5bd71677db44: Pull complete
551df7f94f9c: Pull complete
ce82e98d553d: Pull complete
53dbba7cf7ca: Pull complete
b167200c1204: Pull complete
8871a2ca0dba: Pull complete
Digest: sha256:752ce4a954589eb94d32849db7ede17ce120945cb71f6feabab3697550932ff9
Status: Downloaded newer image for python:3.12
docker.io/library/python:3.12
[node1] (local) root@192.168.0.13 ~
$ docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
python              3.12               efef85b1e82b       2 weeks ago        1.02GB
[node1] (local) root@192.168.0.13 ~
```

## ۳. Run کردن image

اگر بخواهید image را به صورت تعاملی run کنید باید بعد از run عبارت `it` را درج کنید



```
C:\Users\ASUS>docker run -it redis:7.0
1:C 18 Dec 2024 07:38:03.159 # o000o000o000o Redis is starting o000o000o000o
1:C 18 Dec 2024 07:38:03.159 # Redis version=7.0.15, bits=64, commit=00000000, modified=0, pid=1, just started
1:C 18 Dec 2024 07:38:03.159 # Warning: no config file specified, using the default config. In order to specify a config
file use redis-server /path/to/redis.conf
1:M 18 Dec 2024 07:38:03.160 * monotonic clock: POSIX clock_gettime
1:M 18 Dec 2024 07:38:03.161 * Running mode=standalone, port=6379.
1:M 18 Dec 2024 07:38:03.161 # Server initialized
1:M 18 Dec 2024 07:38:03.163 * Ready to accept connections
```

## ٤. مشاهده container ها:

↓

```
C:\Users\ASUS>docker ps
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
99f4b2c8c8ba	redis:7.0	"docker-entrypoint.s..."	5 minutes ago	Up 5 minutes	6379/tcp	youthful_curran

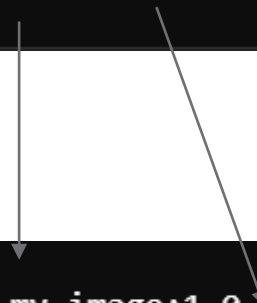
# Dockerfile

# ۱. ایجاد فایلی با نام Dockerfile با محتوای زیر:

```
1 # 1. Specify a base image
2 FROM <base-image>:<tag>
3
4 # 2. Set environment variables (optional)
5 ENV <key>=<value>
6
7 # 3. Copy files to the image
8 COPY <source> <destination>
9 # or
10 ADD <source> <destination>
11
12 # 4. Install dependencies
13 RUN <command>
14
15 # 5. Set working directory
16 WORKDIR <path>
17
18 # 6. Expose ports
19 EXPOSE <port>
20
21 # 7. Define the command to run the application
22 CMD ["executable", "param1", "param2"]
23
```

## 2. build:

```
docker build [OPTIONS] PATH
```



The diagram consists of two arrows. The first arrow starts at the placeholder '[OPTIONS]' in the top command and points down to the flag '-t' in the bottom command. The second arrow starts at the placeholder 'PATH' in the top command and points down to the current directory '.' in the bottom command.

```
docker build -t my-image:1.0 .
```

Good luck 😊

<https://labs.play-with-docker.com>