Hello, World!

```
ali@ALI:~/nodejs-app$ docker run -p 3000:3000 -d nodejs-app
84cf4abccf862a50500b1743359253debf816e5b2136462e79c36a293cbe1e52
ali@ALI:~/nodejs-app$ docker ps
CONTAINER ID   IMAGE        COMMAND             CREATED        STATUS        PORTS                    N
AMES
84cf4abccf86   nodejs-app   "docker-entrypoint.s…"  9 seconds ago  Up 8 seconds  0.0.0.0:3000->3000/tcp   l
aughing_shaw
```

sudo apt install php7.3 php7.3-cli php7.3-fpm php7.3-json php7.3-common php7.3-mysql php7.3-zip php7.3-gd php7.3-mbstring php7.3-curl php7.3-xml php7.3-bcmath php7.3-intl php7.3-soap php7.3-readline

```
ubuntu@ip-172-31-36-1:~$ php -m
[PHP Modules]
bcmath
calendar
Core
ctype
curl
date
dom
exif
fileinfo
filter
ftp
gd
gettext
hash
iconv
intl
json
libxml
mbstring
```

```
ubuntu@ip-172-31-36-1:~$ sudo nano /etc/nginx/sites-available/mobadra.com
ubuntu@ip-172-31-36-1:~$ cat  nano /etc/nginx/sites-available/mobadra.com
cat: nano: No such file or directory
server {
    listen 80;
    server_name mobadra.com;

    root /var/www/html;
    index index.php index.html index.htm;

    location / {
        try_files $uri $uri/ =404;
    }

    location ~ \.php$ {
        include snippets/fastcgi-php.conf;
        fastcgi_pass 127.0.0.1:9000;
    }

    location ~ /\.ht {
        deny all;
    }

    location /static {
        alias /var/www/mobadra.com/html/static;
        gzip on;
        gzip_types image/png image/jpeg;
        gzip_proxied any;
        gzip_min_length 1000;
        expires max;
        add_header Cache-Control "public";
    }
}
ubuntu@ip-172-31-36-1:~$ sudo ln -s /etc/nginx/sites-available/mobadra.com /etc/
nginx/sites-enabled/
```

```
ubuntu@ip-172-31-36-1:~$ sudo unlink /etc/nginx/sites-enabled/default
ubuntu@ip-172-31-36-1:~$ sudo nano /var/www/html/info.php
ubuntu@ip-172-31-36-1:~$
```

```
ubuntu@ip-172-31-36-1:~$ cat  /var/www/html/info.php
<?php
phpinfo();
?>
```

```
ubuntu@ip-172-31-36-1:~$ sudo mkdir -p /var/www/mobadra.com/html/static
ubuntu@ip-172-31-36-1:~$ sudo curl -o /var/www/mobadra.com/html/static/image1.png https://tse4.mm.bing.net/th?id=OIP.XPGyNBUGYO6010eWd3oczwHaHE&pid=Api&P=0&h=220
[1] 44973
[2] 44974
[3] 44975
ubuntu@ip-172-31-36-1:~$    % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100 43715  100 43715    0     0   335k      0 --:--:-- --:--:-- --:--:--  336k
```

```
ubuntu@ip-172-31-36-1:~$ sudo mkdir -p /var/www/mobadra.com/html/static
ubuntu@ip-172-31-36-1:~$ sudo curl -o /var/www/mobadra.com/html/static/image1.png https://tse4.mm.bing.net/th?id=OIP.XPGyNBUGYO6010eWd3oczwHaHE&pid=Api&P=0&h=220
[1] 44973
[2] 44974
[3] 44975
ubuntu@ip-172-31-36-1:~$    % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100 43715  100 43715    0     0   335k      0 --:--:-- --:--:-- --:--:--  336k

[1]   Done                    sudo curl -o /var/www/mobadra.com/html/static/image1.png https://tse4.mm.bing.net/th?id=OIP.XPGyNBUGYO6010eWd3oczwHaHE
[2]-  Done                    pid=Api
[3]+  Done                    P=0
ubuntu@ip-172-31-36-1:~$ ls -l /var/www/mobadra.com/html/static/
total 44
-rw-r--r-- 1 root root 43715 Jul 14 03:12 image1.png
ubuntu@ip-172-31-36-1:~$
```

```
ubuntu@ip-172-31-36-1:~$ sudo nginx -t
nginx: the configuration file /etc/nginx/nginx.conf syntax is ok
nginx: configuration file /etc/nginx/nginx.conf test is successful
ubuntu@ip-172-31-36-1:~$ sudo systemctl restart nginx
ubuntu@ip-172-31-36-1:~$ nano Dockerfile
ubuntu@ip-172-31-36-1:~$ cat Dockerfile
FROM php:7.3-fpm


# Copy website files
COPY . /var/www/html


# Set working directory
WORKDIR /var/www/html


# Install necessary PHP extensions
RUN docker-php-ext-install mysqli pdo pdo_mysql


# Expose port 9000 and run php-fpm
EXPOSE 9000
CMD ["php-fpm"]
ubuntu@ip-172-31-36-1:~$
```

```
ubuntu@ip-172-31-36-1:~$ docker build -t php-app .
[+] Building 37.3s (10/10) FINISHED
 => [internal] load build definition from Dockerfile
 => => transferring dockerfile: 294B
 => [internal] load metadata for docker.io/library/php:7.3-fpm
 => [auth] library/php:pull token for registry-1.docker.io
 => [internal] load .dockerignore
 => => transferring context: 2B
 => [internal] load build context
 => => transferring context: 6.89MB
 => [1/4] FROM docker.io/library/php:7.3-fpm@sha256:2d68e401d2d3b9f9a6572791cd7a25062450c43ff52e58391146809741ad0885
 => => resolve docker.io/library/php:7.3-fpm@sha256:2d68e401d2d3b9f9a6572791cd7a25062450c43ff52e58391146809741ad0885
 => => sha256:2d68e401d2d3b9f9a6572791cd7a25062450c43ff52e58391146809741ad0885 1.86kB / 1.86kB
 => => sha256:ae13dd57832654086018a81dbc128846aa092489260c326ee95429b63c3cf213 31.38MB / 31.38MB
 => => sha256:09f7ea00daea3b9cae2e5951b975de4dabf85357ffd707739c1779cd6dfec02a 2.62kB / 2.62kB
 => => sha256:f15d475049bf47b33a15371e40ba8b1a4535451220b68578292b23738335498b 225B / 225B
 => => sha256:886e5161983fb82d6cbd0a8f7f8d0ebb90c72e349afbc290428b81bb572f0868 91.60MB / 91.60MB
 => => sha256:fdccf4773f9eb394660c00ebbb74bc2c80cd95cec81a00704a2024a25aef652f 11.64kB / 11.64kB
 => => sha256:aa7666573a253171fcc168c406273e5843ae8aae6f251f8690878cdfd3ec1b59 269B / 269B
 => => sha256:6db1ed4113b81521df3794bdb8fdd547001578d51lee9dd3c9540b5a9d146c8e 12.46MB / 12.46MB
 => => sha256:6523562f77d1e534a9a3763046e37c01c7ff9a496244ec96f7274dab28d0eadaf 493B / 493B
 => => extracting sha256:ae13dd57832654086018a81dbc128846aa092489260c326ee95429b63c3cf213
 => => sha256:bcfce89d8d7cf962588c6a977afec5682368a14a880d607d6e9df8c30417e3bb 25.44MB / 25.44MB
 => => sha256:dc59a6f8596de5b906da22c52b98c87a503da50c4c45f87dadba18f9dde13059 2.31kB / 2.31kB
 => => sha256:c563806393c35a3f4972e17216dfcae7903013039cf91db7724b0a492ab2cc43 248B / 248B
 => => sha256:fdbaab56fec96f0345b5952de240fc6f076692f2e8aae684aea43b9cc04b72f 211B / 211B
 => => sha256:83f659d1b6c5ce55e4a0d3ebb4b557d32c59621b4f0cf8ef0fe3149f83703414 0.41kB / 0.41kB
 => => extracting sha256:f15d475049bf47b33a15371e40ba8b1a4535451220b68578292b23738335498b
 => => extracting sha256:886e5161983fb82d6cbd0a8f7f8d0ebb90c72e349afbc290428b81bb572f0868
 => => extracting sha256:aa7666573a253171fcc168c406273e5843ae8aae6f251f8690878cdfd3ec1b59
 => => extracting sha256:6db1ed4113b81521df3794bdb8fdd547001578d51lee9dd3c9540b5a9d146c8e
 => => extracting sha256:6523562f77d1e534a9a3763046e37c01c7ff9a496244ec96f7274dab28d0eadaf
 => => extracting sha256:bcfce89d8d7cf962588c6a977afec5682368a14a880d607d6e9df8c30417e3bb
 => => extracting sha256:dc59a6f8596de5b906da22c52b98c87a503da50c4c45f87dadba18f9dde13059
 => => extracting sha256:c563806393c35a3f4972e17216dfcae7903013039cf91db7724b0a492ab2cc43
 => => extracting sha256:fdbaab56fec96f0345b5952de240fc6f076692f2e8aae684aea43b9cc04b72f
 => => extracting sha256:83f659d1b6c5ce55e4a0d3ebb4b557d32c59621b4f0cf8ef0fe3149f83703414
 => [2/4] COPY . /var/www/html
 => [3/4] WORKDIR /var/www/html
 => [4/4] RUN docker-php-ext-install mysqli pdo pdo_mysql
 => exporting to image
 => => exporting layers
 => => writing image sha256:0cd798af0295a4bd9fd6412f9511075109280c558f126e6ab9d11de5caa6839e
 => => naming to docker.io/library/php-app
ubuntu@ip-172-31-36-1:~$
```

```
ubuntu@ip-172-31-36-1:~$ docker run -d -p 9000:9000 --name php-app php-app
1b4526de2a58c5dd03547f8cc47a8850526ae59d5d5c1ae93a74a72466f07d34
ubuntu@ip-172-31-36-1:~$
```

```
ubuntu@ip-172-31-36-1:~$ ping mobadra.com
PING hdr-nlb7-aebd5d615260636b.elb.us-east-1.amazonaws.com (34.205.242.146) 56(84) bytes of data.
```

```
ubuntu@ip-172-31-36-1:~$ ping mobadra.com
PING mobadra.com (127.0.0.1) 56(84) bytes of data.
64 bytes from localhost (127.0.0.1): icmp_seq=1 ttl=64 time=0.028 ms
64 bytes from localhost (127.0.0.1): icmp_seq=2 ttl=64 time=0.033 ms
64 bytes from localhost (127.0.0.1): icmp_seq=3 ttl=64 time=0.040 ms
64 bytes from localhost (127.0.0.1): icmp_seq=4 ttl=64 time=0.032 ms
64 bytes from localhost (127.0.0.1): icmp_seq=5 ttl=64 time=0.033 ms
64 bytes from localhost (127.0.0.1): icmp_seq=6 ttl=64 time=0.141 ms
64 bytes from localhost (127.0.0.1): icmp_seq=7 ttl=64 time=0.033 ms
^C
--- mobadra.com ping statistics ---
7 packets transmitted, 7 received, 0% packet loss, time 6138ms
rtt min/avg/max/mdev = 0.028/0.048/0.141/0.037 ms
ubuntu@ip-172-31-36-1:~$ curl mobadra.com
<html>
<head><title>403 Forbidden</title></head>
<body>
<center><h1>403 Forbidden</h1></center>
<hr><center>nginx/1.24.0 (Ubuntu)</center>
</body>
</html>
```

← → C ⌂   ⚠ Not secure mobadra.com
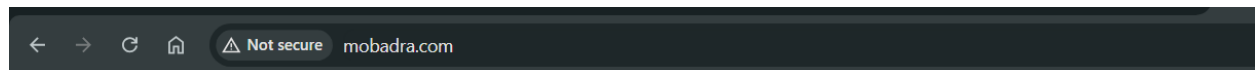
Success! The mobadra.com server block is working!

Commands

sudo mkdir -p /var/www/mobadra.com/html

sudo mkdir -p /var/www/test.com/html

sudo chown -R $USER:$USER /var/www/example.com/html

sudo chown -R $USER:$USER /var/www/test.com/html

sudo chmod -R 755 /var/www

nano /var/www/example.com/html/index.html

<html>

   <head>

```
    <title>Welcome to Mobadra.com!</title>
  </head>
  <body>
    <h1>Success! The mobadra.com server block is working!</h1>
  </body>
</html>


cp /var/www/mobadra.com/html/index.html /var/www/test.com/html/

nano /var/www/test.com/html/index.html

<html>
  <head>
    <title>Welcome to Test.com!</title>
  </head>
  <body>
    <h1>Success!  The test.com server block is working!</h1>
  </body>
</html>


sudo cp /etc/nginx/sites-available/default /etc/nginx/sites-available/mobadra.com

sudo nano /etc/nginx/sites-available/mobadra.com


server {
    listen 80;
    listen [::]:80;

    root /var/www/ mobadra.com/html;
    index index.html index.htm index.nginx-debian.html;

    server_name mobadra.com www. mobadra.com;
```

```nginx
    location / {
        try_files $uri $uri/ =404;
    }
}
```

```bash
grep -R default_server /etc/nginx/sites-enabled/
sudo cp /etc/nginx/sites-available/mobadra.com /etc/nginx/sites-available/test.com
sudo nano /etc/nginx/sites-available/test.com
```

```nginx
server {
    listen 80;
    listen [::]:80;

    root /var/www/test.com/html;
    index index.html index.htm index.nginx-debian.html;

    server_name test.com www.test.com;

    location / {
        try_files $uri $uri/ =404;
    }
}
```

```bash
sudo ln -s /etc/nginx/sites-available/mobadra.com /etc/nginx/sites-enabled/
sudo ln -s /etc/nginx/sites-available/test.com /etc/nginx/sites-enabled/
sudo nano /etc/nginx/nginx.conf
```

```nginx
http {
    . . .

    server_names_hash_bucket_size 64;
```

```
    . . .
}
sudo nginx -t
sudo systemctl restart nginx
sudo nano /etc/hosts
127.0.0.1  mobadra.com www.mobadra.com
127.0.0.1 test.com www.test.com
```