

# Docker

1.

A.

```
docker@manager1:~$ docker node ls
```

ID	HOSTNAME	STATUS	AVAILABILITY	MANAGER STATUS	ENGINE VERSION
2kx3ir1o5u261e7djvbuqg51w *	manager1	Ready	Active	Leader	18.06.0-ce
zjz742xni2ycuuvl1x1qrgfs2	worker1	Ready	Active		18.06.0-ce
si6uiy6sa23p5ok3fjicqu1xx	worker2	Ready	Active		18.06.0-ce
sicqu1xxa23p5ok3fjicqu1xx	worker3	Ready	Active		18.06.0-ce

B.

```
docker@manager1:~$ docker service ps web
```

ID	NAME	IMAGE	NODE	DESIRED STATE	CURRENT STATE
5gu7kmb1ztqc	web.1	nginx:latest	worker1	Running	Running 5 seconds ago
z9bdi162f3us	\_ web.1	nginx:latest	worker2	Shutdown	Shutdown 6 seconds ago
hfcy5hqsekh2	web.2	nginx:latest	manager1	Running	Running about an hour ago
xzy35qtappz3	web.3	nginx:latest	worker1	Running	Running about an hour ago
byz5q9xf6qno	web.4	nginx:latest	manager1	Running	Running 18 minutes ago
sxy8nopj7hyo	web.5	nginx:latest	worker1	Running	Running 5 seconds ago
k0hfbhdczfub	\_ web.5	nginx:latest	worker2	Shutdown	Shutdown 6 seconds ago
5gu7kmb1ztqc	web.1	nginx:latest	worker1	Running	Running 5 seconds ago
z9bdi162f3us	\_ web.1	nginx:latest	worker2	Shutdown	Shutdown 6 seconds ago
hfcy5hqsekh2	web.2	nginx:latest	manager1	Running	Running about an hour ago
xzy35qtappz3	web.3	nginx:latest	worker1	Running	Running about an hour ago
byz5q9xf6qno	web.4	nginx:latest	manager1	Running	Running 18 minutes ago
sxy8nopj7hyo	web.5	nginx:latest	worker1	Running	Running 5 seconds ago
k0hfbhdczfub	\_ web.5	nginx:latest	worker2	Shutdown	Shutdown 6 seconds ago

2.

A.

```
version: '3'
services:
  web:
    build: .
    ports:
      - "10000:10000"
    volumes:
      - .:/code
  redis:
    image: "redis:alpine"
```

B.

```
import time

import redis
from flask import Flask

app = Flask(__name__)
cache = redis.Redis(host='redis', port=6379)

@app.route('/')
def hello():
    return 'Daniel'

if __name__ == "__main__":
    app.run(host="0.0.0.0", debug=True)
```