Containerizing application using Docker Stack

1 Create new directory and set as PWD

```
$ mkdir wordpress-stack &&
cd wordpress-stack
```

2 Create YAML for MySQL & Wordpress

```
$ nano docker-compose.yaml

version: '3.3'

services:
   db:
     image: mysql:5.7
     environment:
       MYSQL_ROOT_PASSWORD: somewordpress
       MYSQL_DATABASE: wordpress
       MYSQL_USER: wordpress
       MYSQL_PASSWORD: wordpress
     volumes:
       - db_data:/var/lib/mysql
     deploy:
      mode: global
     networks:
      WP-stack:
```

Continued...

Resume

```
    wordpress:
      depends_on:
        - db
      image: wordpress:latest
      environment:
        WORDPRESS_DB_HOST: db:3306
        WORDPRESS_DB_USER: wordpress
        WORDPRESS_DB_PASSWORD: wordpress
        WORDPRESS_DB_NAME: wordpress
      ports:
        - "8000:80"
      deploy:
       mode: global
      networks:
       WP-stack:

volumes:
  db_data: {}

networks:
  WP-stack:
   driver: overlay
```

3 Deploy a stack of services

```
$ docker stack deploy --compose-file
docker-compose.yaml wordpress-mysql
```

4 List out available stacks

```
$ docker stack ls
```

5 List out services available in stack

```
$ docker stack services wordpress-mysql
```

6 List out tasks created under this stack

```
$ docker stack ps wordpress-mysql
```

7 Inspect the database service

```
$ docker service inspect wordpress-
mysql_db
```

8 Get the logs of wordpress service

```
$ docker service logs wordpress-
mysql_wordpress
```

9 Delete the stack

```
$ docker stack rm wordpress-mysql
```

10 List out volumes

```
$ docker volume ls
```