**DOCKER INTERVIEW QUESTIONS**

1. What is the difference between a container and a virtual machine?
2. What is Docker Engine?
3. What is a Docker image?
4. What is Docker Hub?
5. How do you create a Docker container from an image?
6. What is a Dockerfile?
7. Talk about hypervisors and their functions.
8. How do you build a Docker image using a Dockerfile?
9. How do you start and stop a Docker container?
10. List down the components of Docker.
11. How do you remove a Docker container?
12. How can you remove all stopped containers and unused networks in Docker?
13. When a container exists, is it possible for you to lose data?
14. What is Docker Compose?
15. Is there a limit on how many containers you can run in Docker?
16. Differentiate between Container Logging and Daemon Logging.
17. How will you use Docker for multiple application environments?
18. Does Docker provide support for IPV6?
19. How do you scale Docker containers horizontally?
20. What is the difference between the CMD and ENTRYPOINT instructions in a Dockerfile?
21. What is the purpose of volumes in Docker?
22. Is it possible for a container to restart by itself?
23. How do you expose ports in a Docker container?
24. How do you pass environment variables to a Docker container?
25. What is the difference between Docker restart policies "no", "on-failure", and "always"?
26. What is the purpose of the Docker registry?
27. What is the difference between a Docker image and a container?
28. How do you update a Docker image?
29. What is the difference between a base image and a child image in Docker?
30. What is the purpose of the CMD instruction in a Dockerfile?
31. How do you inspect the metadata of a Docker image?
32. What is Docker Swarm?
33. What is the difference between a Docker container and a Kubernetes pod?
34. How does Docker handle container isolation and security?
35. What is the purpose of a Docker volume driver?
36. How do you deploy a Docker container to a remote host?
37. What are the benefits of using Docker in a microservices architecture?
38. How do you debug issues in a Docker container?
39. What is the purpose of the "docker exec" command?
40. How do you limit the CPU and memory usage of a Docker container?
41. What is the significance of the "Dockerfile.lock" file?
42. How do you create a multi-stage build in Docker?

**INTERMEDIATE DOCKER INTERVIEW QUESTIONS AND ANSWERS**

1. How do you link containers in Docker?
2. What are Docker networks?
3. How do you create a custom Docker network?
4. What is the purpose of the bridge network driver in Docker?
5. What are Docker volumes and how do they work?
6. How do you manage data persistence in Docker containers?
7. How do you update a Docker container without losing data?
8. What is the difference between COPY and ADD instructions in a Dockerfile?
9. What are Docker labels and how do you use them?
10. How do you secure Docker containers?
11. How do you create a Docker Swarm cluster?
12. What is the purpose of Docker secrets?
13. How do you manage secrets in Docker Swarm?
14. How does Docker handle service discovery in Swarm mode?
15. What is Docker overlay networking?
16. What is the purpose of Docker container orchestration?
17. How do you monitor Docker containers?
18. What are some best practices for using Docker in production environments?
19. How do you automate the deployment of Docker containers?
20. How do you perform rolling updates in Docker Swarm?
21. What is Docker content trust?
22. How do you use Docker with Kubernetes?
23. What are the differences between Docker Swarm and HashiCorp Nomad?
24. How do you configure automatic container restarts in Docker?
25. What is the role of the Docker API in container management?
26. .How do you share data between containers in Docker?
27. How do you manage network connectivity between Docker containers and the host machine?
28. What is the purpose of the "docker network inspect" command?
29. How do you configure health checks for Docker containers?
30. How do you configure a custom logging driver in Docker?
31. What is the purpose of the "docker system prune" command?
32. How do you use Docker secrets in a non-Swarm environment?

**ADVANCED DOCKER INTERVIEW QUESTIONS AND ANSWERS**1.

1.How do you achieve high availability with Docker Swarm?

2.What are the differences between Docker Swarm and Kubernetes?

3.How do you implement blue-green deployments with Docker?

4.What is the purpose of the Docker Config feature in Swarm mode?

5.How do you manage secrets in Docker using external secret stores?

6.What is the purpose of the health check feature in Docker?

7.How do you securely manage secrets in a Dockerized application?

8.How do you achieve load balancing with Docker Swarm?

9.What is Docker's support for GPU acceleration?

10.How do you troubleshoot issues with Docker containers?

11.What are some common Docker security vulnerabilities and how do you mitigate them?

12.How do you monitor Docker container resource usage?

13.How do you automate the scaling of Docker services in Swarm mode?

14.What is Docker Machine and how is it used?

15.How do you configure Docker to use a different container runtime?

16.What is the purpose of Docker namespaces?

17.How do you limit the resources consumed by a Docker container?

18.How do you configure network policies in Docker?

19.What is the difference between a Docker image and a Docker layer?

20.How do you manage Docker container logs?

21.What is the purpose of Docker secrets in Swarm mode?

22.How do you manage Docker images in a private registry?

23.How do you perform load testing on Docker containers?

24.How do you create a custom Docker network driver?

25.What is the purpose of the Docker content trust feature?

26.How do you perform rolling updates with Docker Compose?

27.How do you implement service discovery and load balancing in Kubernetes?

28.What is the purpose of the Docker plugin system?

29.How do you configure Docker to use a different storage driver?

30.How do you implement canary deployments with Docker and Kubernetes?

31.What are the differences between Docker Community Edition (CE) and Docker Enterprise Edition (EE)?

32.How do you configure Docker to use a private image registry?

33.What is the purpose of the "docker checkpoint" command?

34.How do you configure Docker to use IPv6 networking?

35.What is the role of containerd in the Docker ecosystem?

36.How do you perform a live migration of Docker containers between hosts?