AWS EC2 Interview Questions (Basic to Advanced)

Basic Level For Absolute Beginners / Freshers

1. What is Amazon EC2?

2. What are the benefits of using EC2?

3. What are the main features of EC2?

4. What is an AMI (Amazon Machine Image)?

5. What is the difference between EC2 and traditional servers?

6. What are the steps to launch an EC2 instance?

7. What is an EBS volume?

8. What is a key pair and why is it required?

9. What is the use of a security group in EC2?

10. How do you connect to a Linux EC2 instance?

11. What are public and private IP addresses in EC2?

12. Can we stop/start and terminate an EC2 instance? What is the difference?

13. What are the different pricing options available in EC2?

14. What is the purpose of Elastic IP?

15. What happens to your data when you stop or terminate an EC2 instance?

AWS EC2 Interview Questions (Basic to Advanced)

Intermediate Level For 12 Years Experience or In-Depth Learning

1. What are the different instance types in EC2?

2. What is the difference between EBS and Instance Store?

3. What is user data in EC2? How is it used?

4. What is a security group vs NACL (Network ACL)?

5. How do you resize or change the instance type of an EC2 instance?

6. How to attach or detach an EBS volume?

7. How do you automate EC2 instance provisioning using AWS CLI or SDK?

8. What are Placement Groups in EC2? What are the types?

9. How do you monitor an EC2 instance (e.g., CPU, disk usage)?

10. What is the purpose of CloudWatch with EC2?

11. How do you schedule automatic start/stop of EC2 instances?

12. How to secure SSH access to EC2?

13. What is a Bastion Host and why is it used?

14. What is EC2 Auto Recovery?

15. What are EC2 launch templates?

AWS EC2 Interview Questions (Basic to Advanced)

Advanced Level FAANG Interview Level (Conceptual + Practical)

1. How does EC2 Auto Scaling work?

2. What are EC2 Spot Instances and how do they save cost?

3. How do you implement fault tolerance and high availability using EC2?

4. What is the EC2 Lifecycle and Instance Metadata?

5. What is an EC2 Spot Fleet and how does it differ from a single Spot Instance?

6. How do you configure EC2 instances using AWS Systems Manager (SSM)?

7. What is EC2 Hibernate and when would you use it?

8. Explain the EC2 Nitro System and its advantages.

9. What is the difference between Dedicated Host and Dedicated Instance in EC2?

10. How do you secure sensitive data on an EC2 instance?

11. How to create a custom AMI from an EC2 instance and use it?

12. How to do Blue-Green deployment using EC2 and Load Balancers?

13. How do you integrate EC2 with a CI/CD pipeline (e.g., using CodeDeploy)?

14. What is the difference between EC2 and Lambda? When to use which?

15. How do you handle configuration drift in EC2 environments?

AWS EC2 Interview Questions (Basic to Advanced)

16. What strategies do you use to reduce EC2 cost at scale?

17. How would you troubleshoot EC2 boot issues (e.g., instance not responding)?

18. How do you enable logging and auditing on EC2 instances?

19. How do you ensure encrypted data at rest and in transit on EC2?

20. What are the best practices for running production workloads on EC2?

Bonus: Scenario-Based Questions

1. You launched an EC2 instance but cannot SSH into it. How will you troubleshoot?

2. Your EC2 instance is rebooting repeatedly. What steps will you take?

3. Your app hosted on EC2 is slow under high traffic. How will you optimize?

4. How do you migrate an on-premise server to AWS EC2 with minimal downtime?

5. You need to set up EC2 in a multi-AZ architecture. How would you design it?