Kafka

Producer: Sends messages to Kafka topics.

Consumer: Reads messages from topics.

Broker: Kafka server that stores data.

Topic: A category to which records are sent.

Zookeeper: Manages metadata.

AWS DevOps

Code Pipeline: Automates CI/CD pipelines.

Code Build: Builds and tests code.

Code Deploy: Automates application deployment.

Code Commit: A source control service for Git repositories.

CloudFormation: Manages infrastructure as code.

Elastic Beanstalk: Deploys and manages applications.

CloudWatch: Monitors resources and logs.

ECS/EKS: Container orchestration services.

Infrastructure as Code: is the practice of managing and provisioning infrastructure using code.

Amazon S3: Stores build artifacts and logs, backups

AWS Lambda: Used in CI/CD workflows, automation scripts.

Elastic Load Balancers: distribute incoming traffic across multiple targets.

auto-scaling: adjusts the number of EC2 instances based on defined scaling policies.

IAM roles: enable secure access to AWS services without sharing credentials.

Reserved instances: It provides discount for use of specific EC2 resources over a period.

spot instances: Spot instances are spare EC2 capacity offered at a lower price.

Blue/Green Deployments: new environment (green) is deployed

and existing one (blue) for rollbacks.

VPC: A Virtual Private Cloud (VPC) isolates resources, secures applications,

and supports hybrid cloud setups.

Elastic File System (EFS): provides scalable, shared storage for EC2 instances.