What is Lambda and what are different event sources that can trigger it ?

What is Lambda ?

AWS Lambda is a serverless, event-driven compute service that runs your code without provisioning or managing servers. You upload a function (code + configuration) and Lambda runs it in response to events.

- **When to use:** short-lived tasks, event processors, microservices, lightweight API handlers, glue logic between services, cron-style jobs (via EventBridge).
- **Benefits:** no server management, automatic scaling, pay-for-use.

event sources for Lambda

Lambda is triggered by many AWS services; common sources include: **API Gateway**, **S3** (object events), **DynamoDB Streams**, **Kinesis**, **SQS**, **SNS**, **EventBridge / CloudWatch Events**, and orchestration via **Step Functions**.

- Each source has different invocation semantics (sync vs async, ordering guarantees, batch size, retry behavior).

Which of the following is NOT a typical use case for AWS Lambda?

A. Short-lived tasks and event processors
B. Lightweight API handlers
C. Running always-on large-scale applications
D. Cron-style jobs using EventBridge

C. Running always-on large-scale applications ✅

What is a key benefit of using AWS Lambda?

A. Manual server provisioning is required
B. Automatic scaling and pay-per-use

C. Reserved capacity billing only
D. Requires dedicated infrastructure management

B. Automatic scaling and pay-per-use ✅

Which of the following services can be an event source for AWS Lambda?
A. Amazon S3
B. Amazon DynamoDB Streams
C. Amazon Kinesis
D. All of the above

D. All of the above ✅
