

## 💡 AWS LAMBDA

✦ AWS Lambda is an Amazon serverless service that runs code and automatically manages the underlying computing resources.

✦ We pay only for the compute time we consume, no charge needs to pay when code is not running. No charges for creating AWS Lambda functions and no backend cost as well.

✦ AWS Lambda code can be written in NodeJS, Java, C#, Python etc.

✦ The code will execute based on the events response, such as adding/removing files in [#s3](#) bucket, HTTP request from [#amazon](#) API Gateway etc.

### ▶ ***AWS Lambda works as below:***

1. Developer writes and upload code in [#aws](#) Lambda.
2. When an event specified occurred, then it will trigger the function.
3. AWS [#lambda](#) runs the code it triggered.
4. AWS manages the associated infrastructure and resources.
5. Lambda function will automatically destroy once the specified task completed.

### ✕ **Use Cases**

- >Helps for ETL process
- >Create compliance/authentication rules
- >Use for creating web applications
- >Automated Backups of everyday tasks
- >Scalable back ends (mobile apps, IoT devices)

### ✕ **Advantages**

- >Very fast as it will execute the code in milliseconds
- >Highly flexible
- >No need to manage the resources
- >Uses for scheduling as it is configured with external event and timers
- >It can be scaled quickly as the Lambda functions are stateless

### ✕ **Limitations**

- >Not suitable for small projects
- >Cannot install any additional software if code demands it as it relies on AWS infrastructure