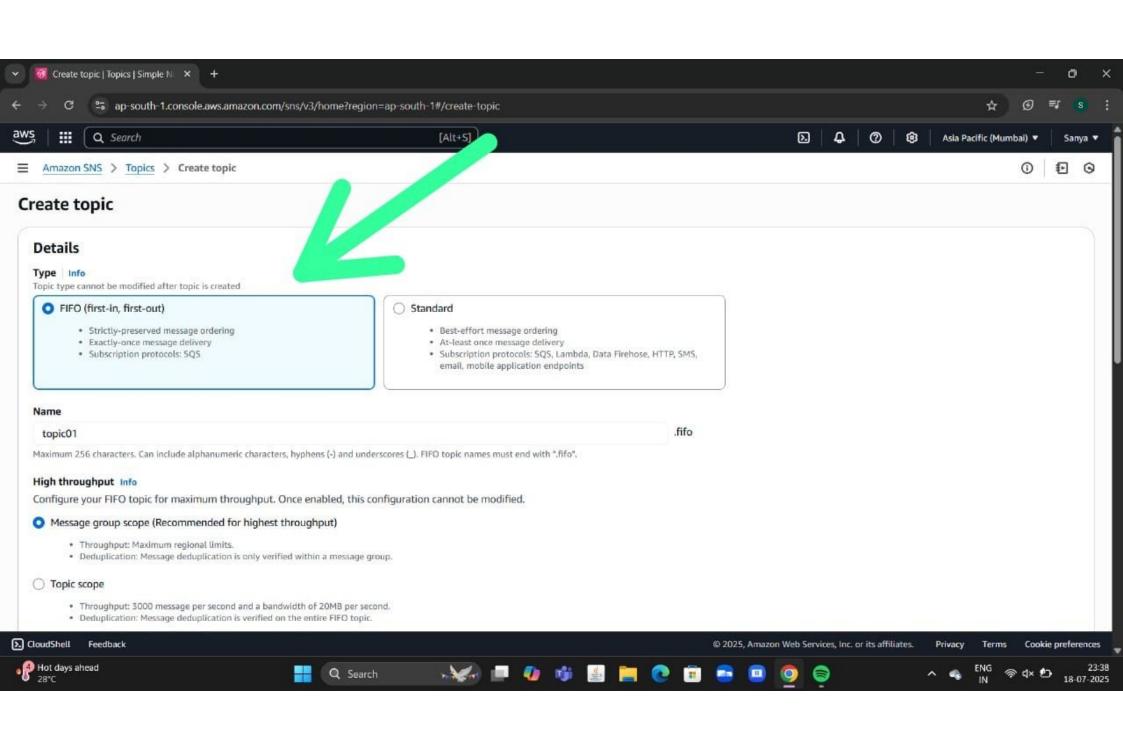


AMAZON SNS:

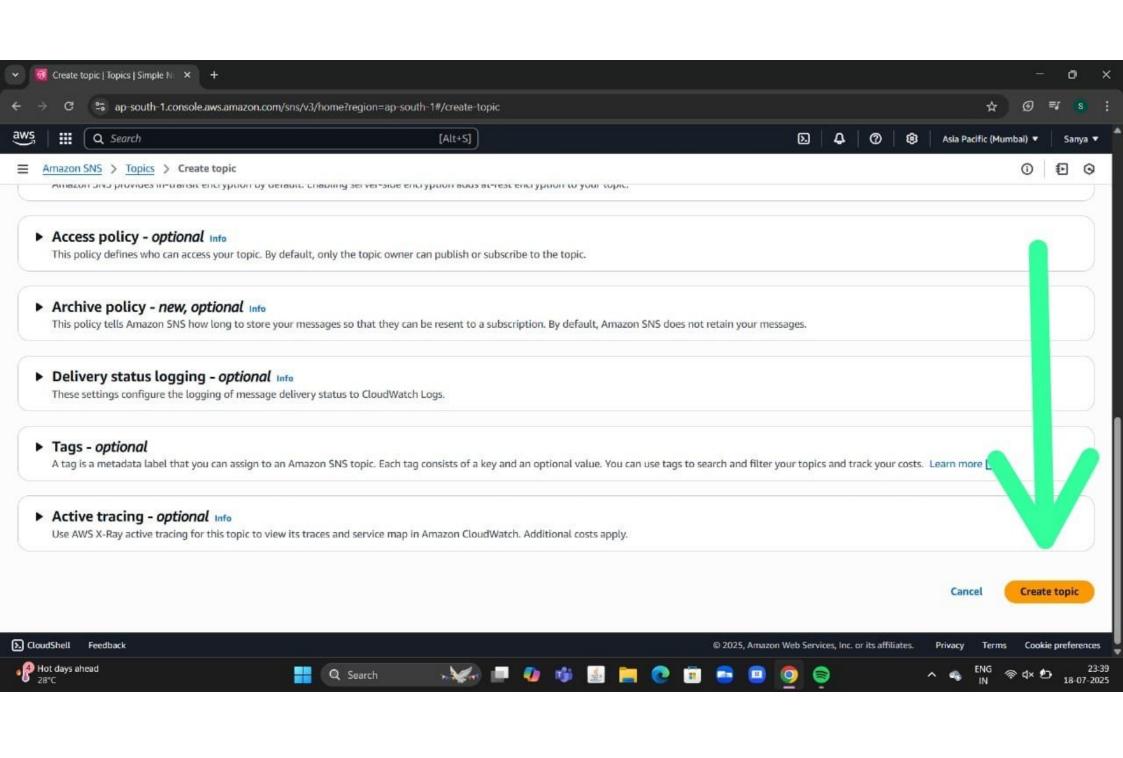
AMAZON SNS stands for Amazon Simple Notification Service. It is used in AWS for delivering messages from publishers to subscribers. It communicates through communication channel known as topic. Subscribers to an SNS topic can receive messages through different endpoints, depending on their use case, such as: Lambda, Amazon SQS, Email, SMS, etc.

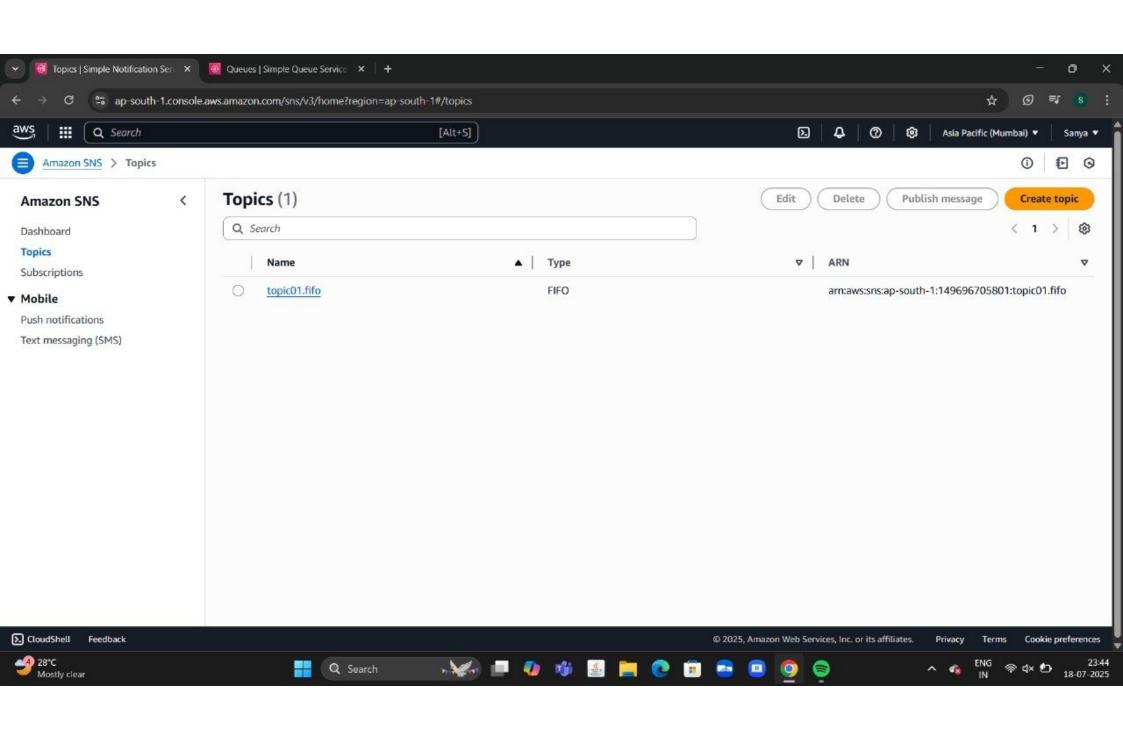
SNS supports both Application-to-Application and Application-to-Person messaging, giving flexibility to send messages between different applications or directly to mobile phones, email addresses, and more.

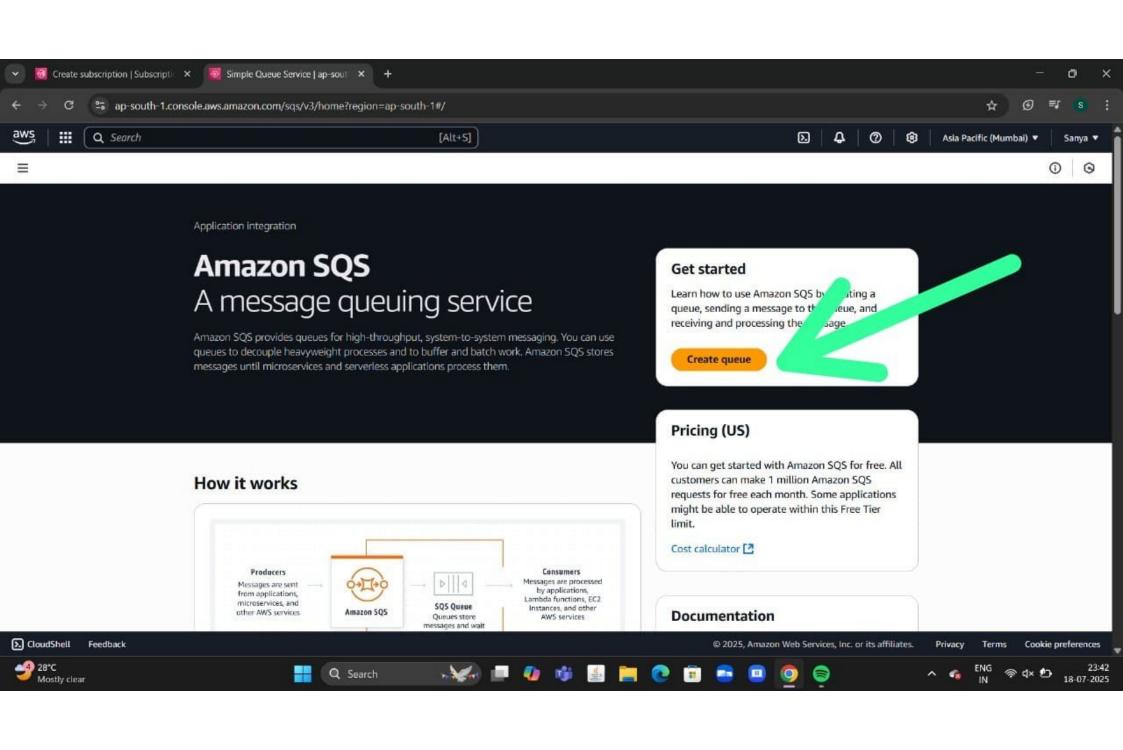


TOPIC:

In AWS, a TOPIC in Amazon SNS (Simple Notification Service) is a communication channel used to send messages to multiple subscribers at once. Topics allow you to send messages to many endpoints—such as email addresses, SMS numbers, or AWS services (like Lambda or SQS). Publishers send messages to the topic, and all subscribers who have opted in receiving the message.

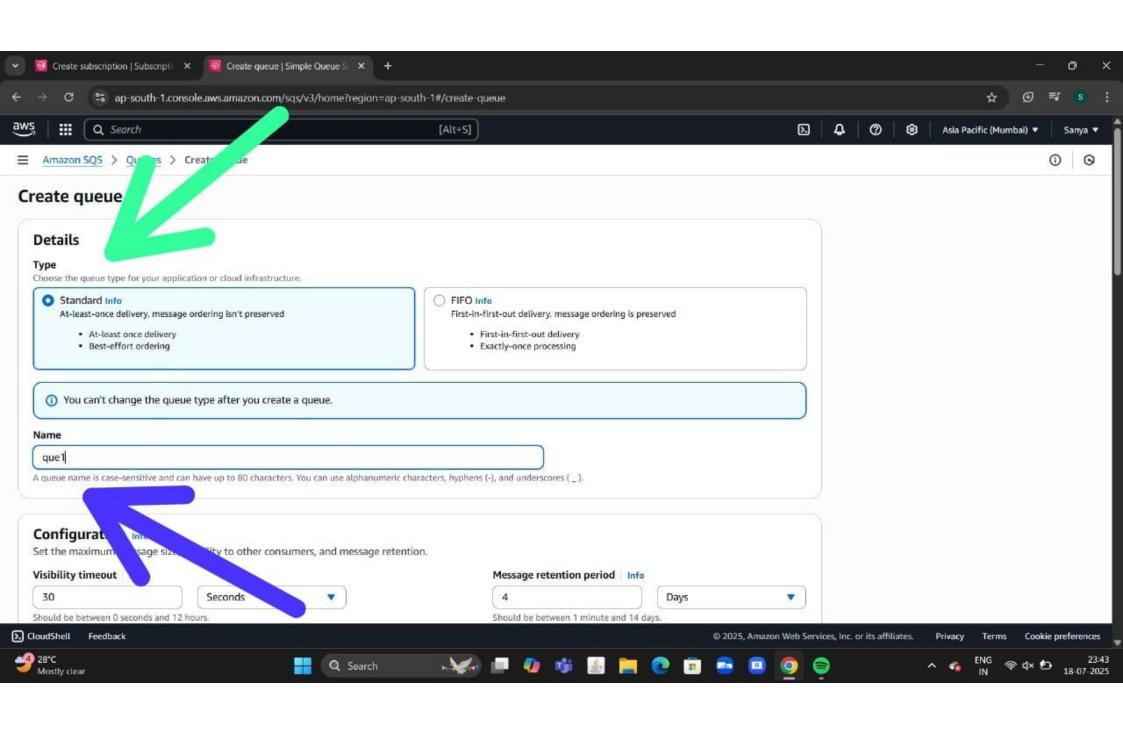






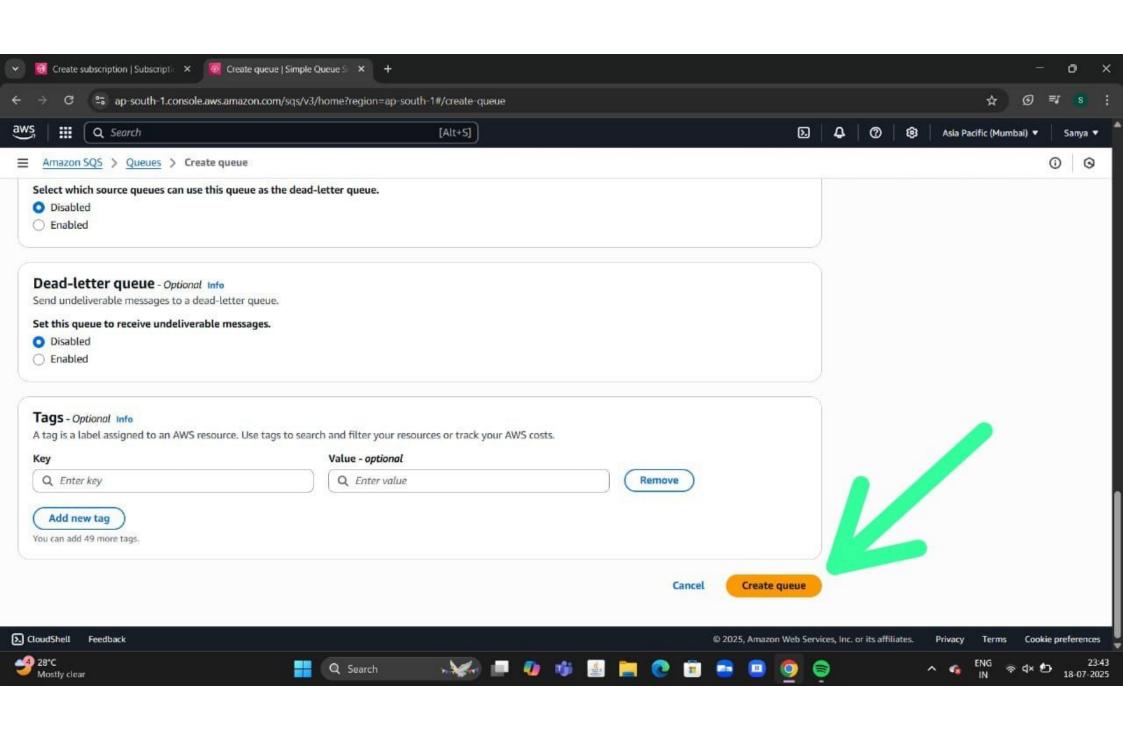
AMAZON SQS:

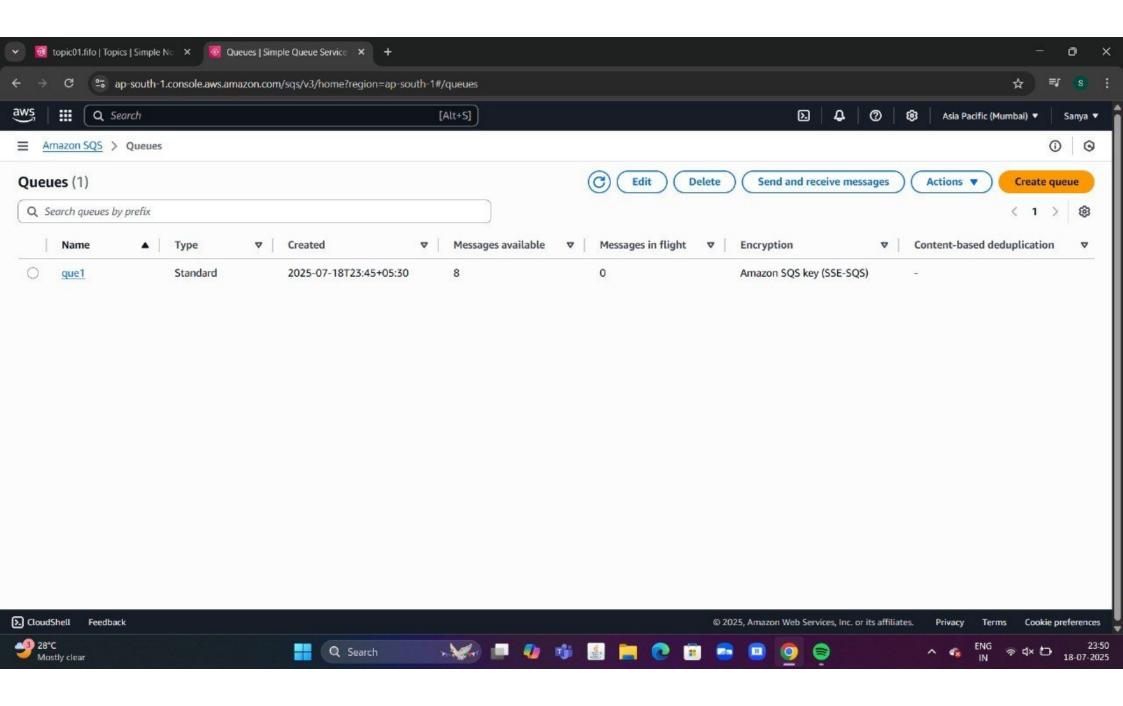
AMAZON SQS stands for Amazon Simple Queue Service. It offers a secure, durable, and available hosted queue and can receive, store and send messages. Amazon SQS offers common constructs such as dead letter queues and cost allocation tags. Some benefits of SQS are: Security (server-side encryption is available), durability (stores messages on multiple servers), availability, scalability, reliability, and customization.

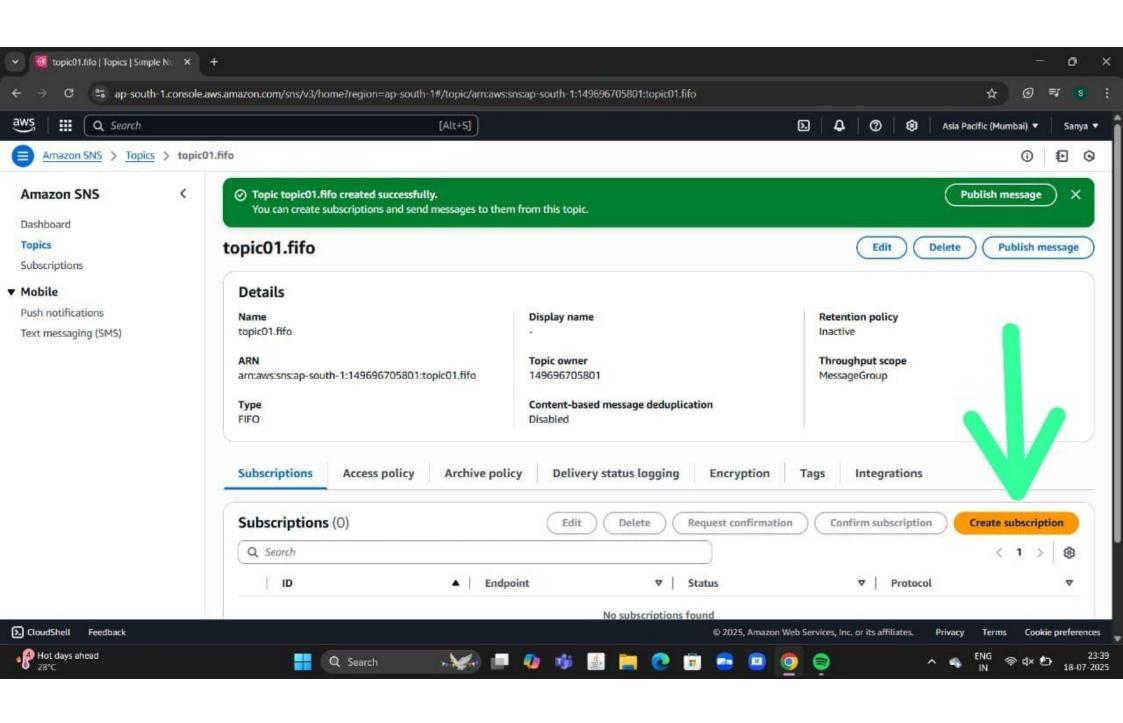


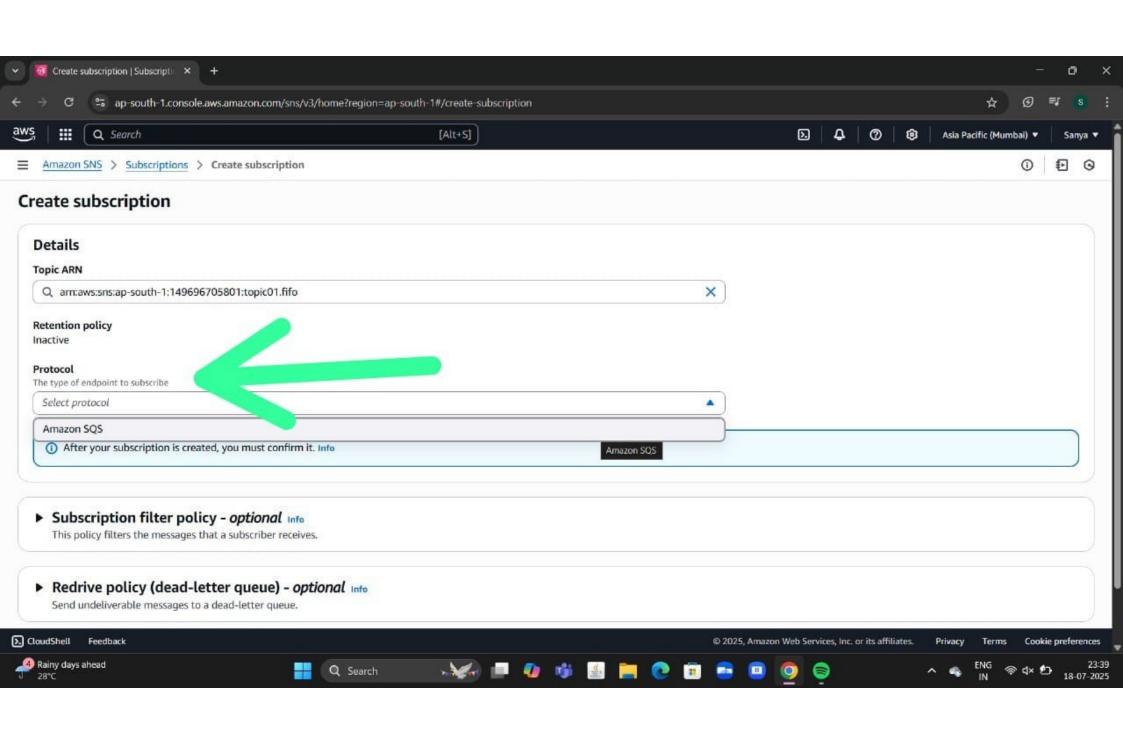
QUEUE :

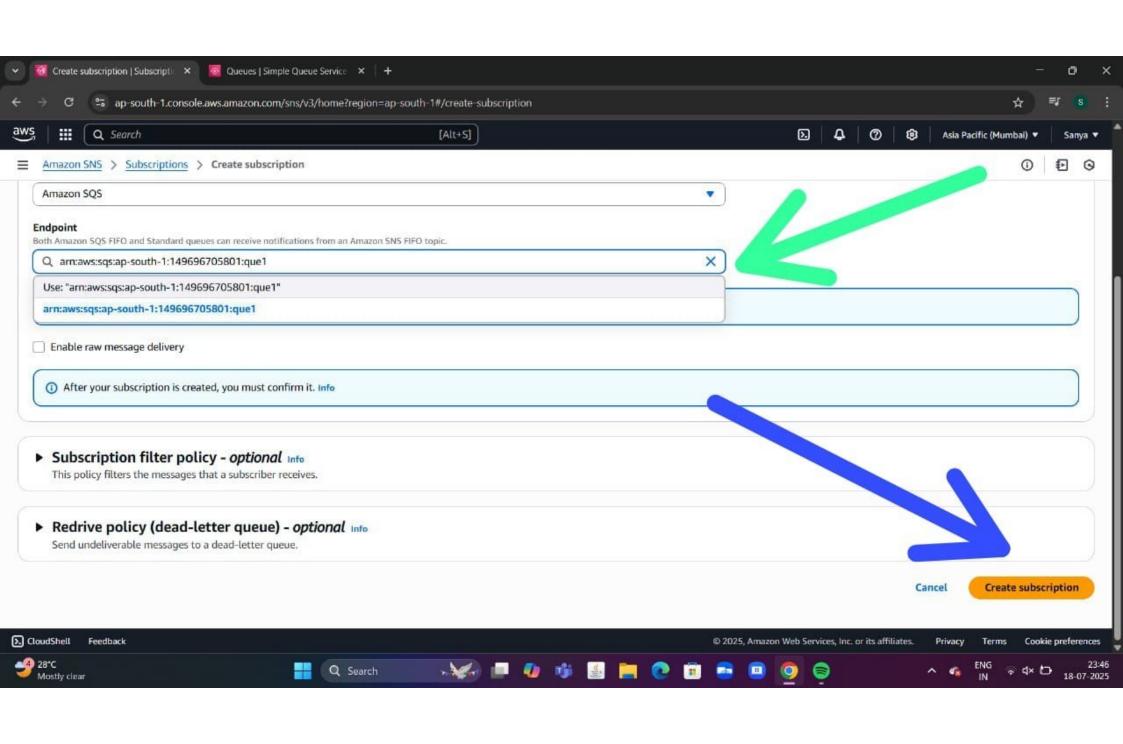
In AWS, a Queue in Amazon SQS is a temporary storage for messages. Producers send messages to the queue, and consumers retrieve and process them asynchronously. SQS supports two types of queues: Standard queues (which offer high throughput with at-least-once delivery) and FIFO queues (which preserve the exact order of messages with exactly-once processing).

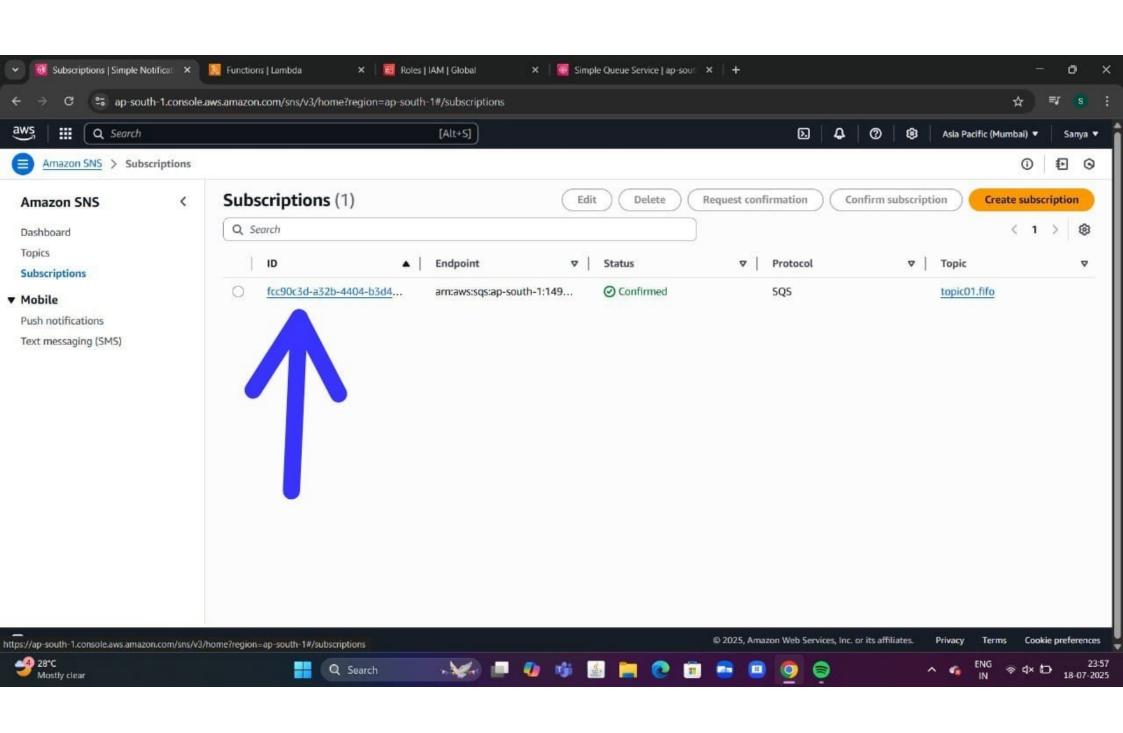


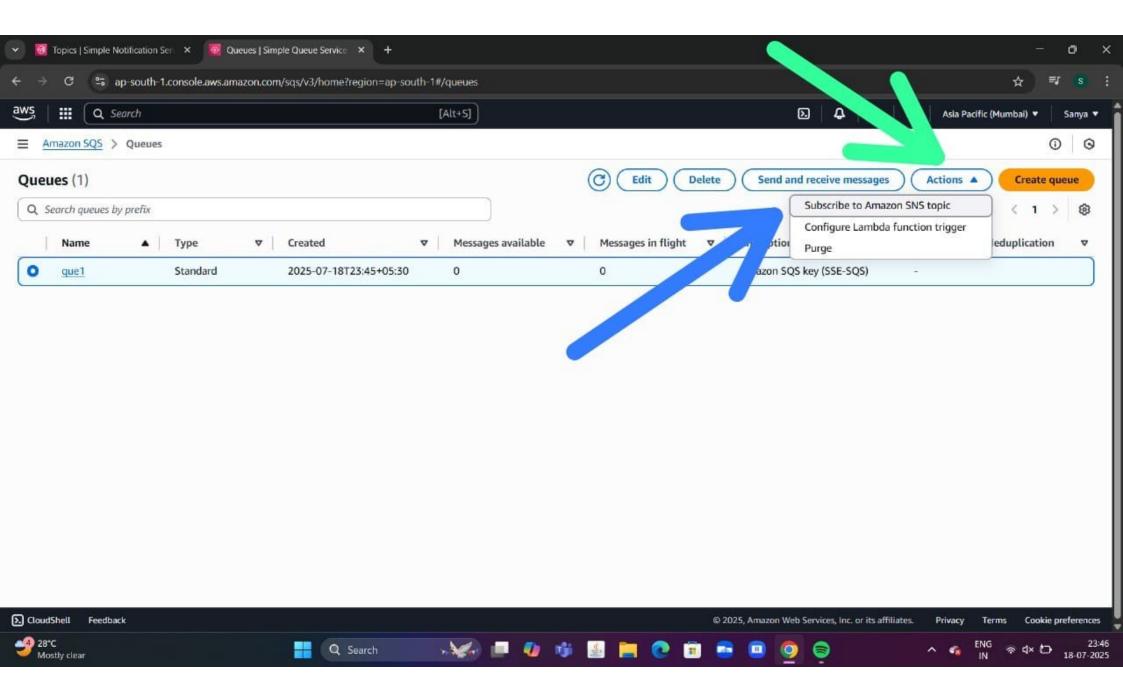


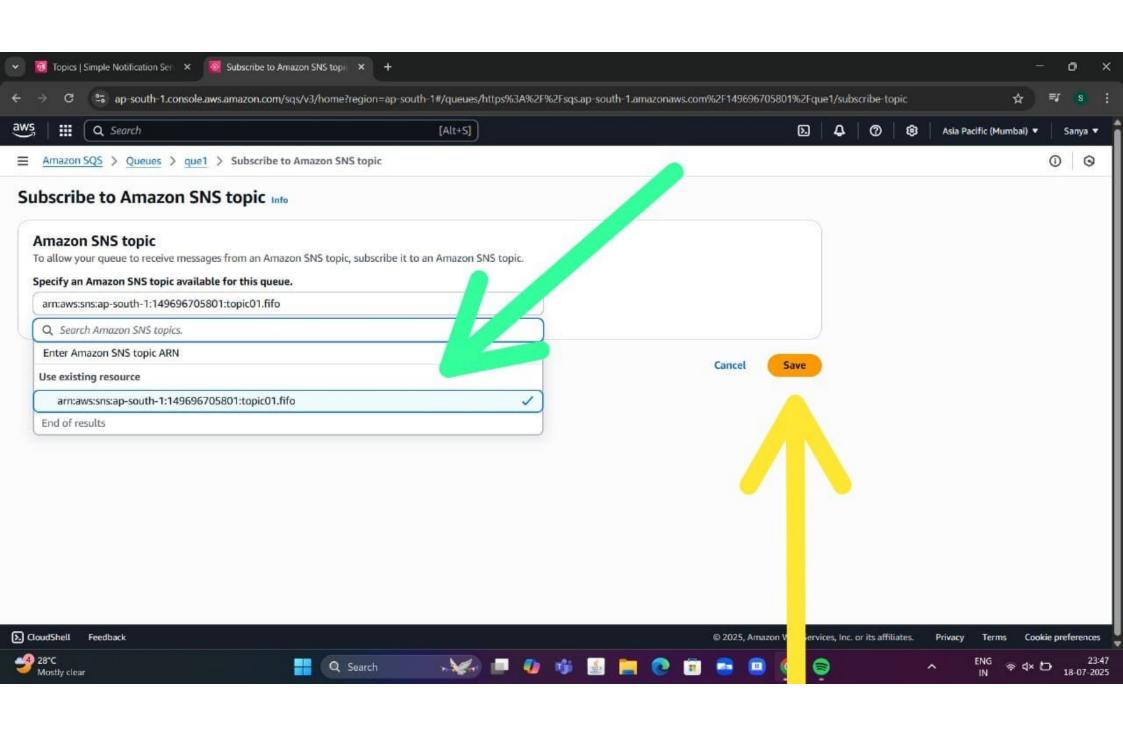


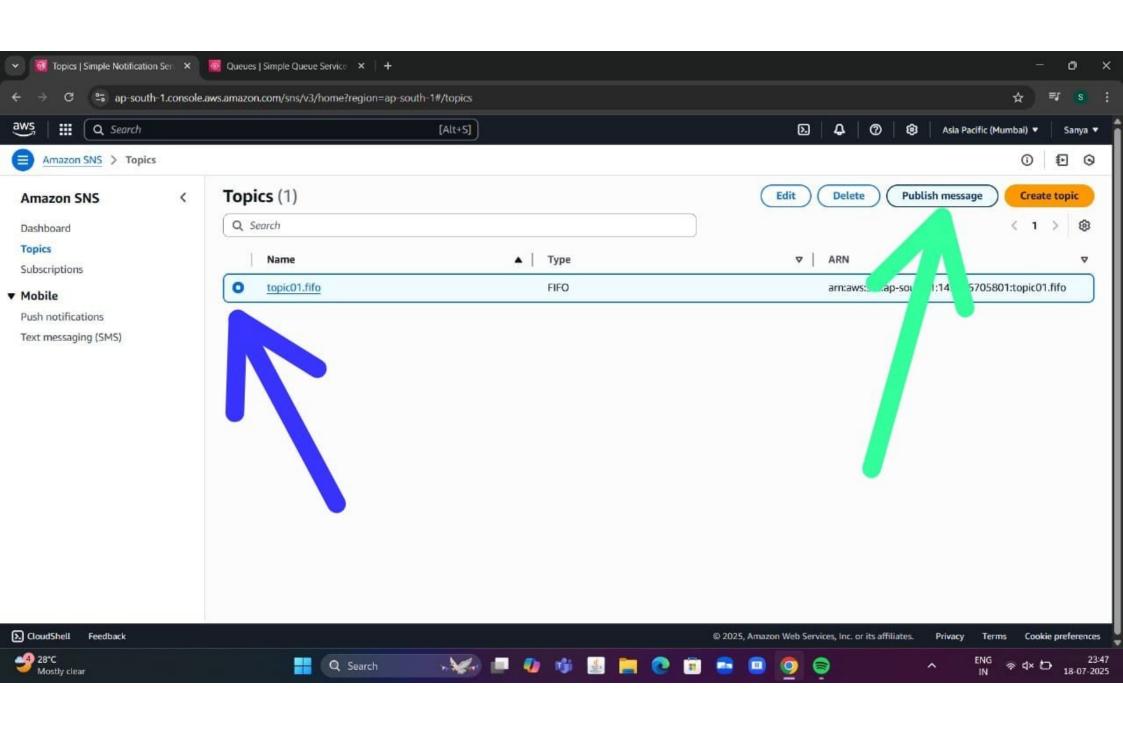


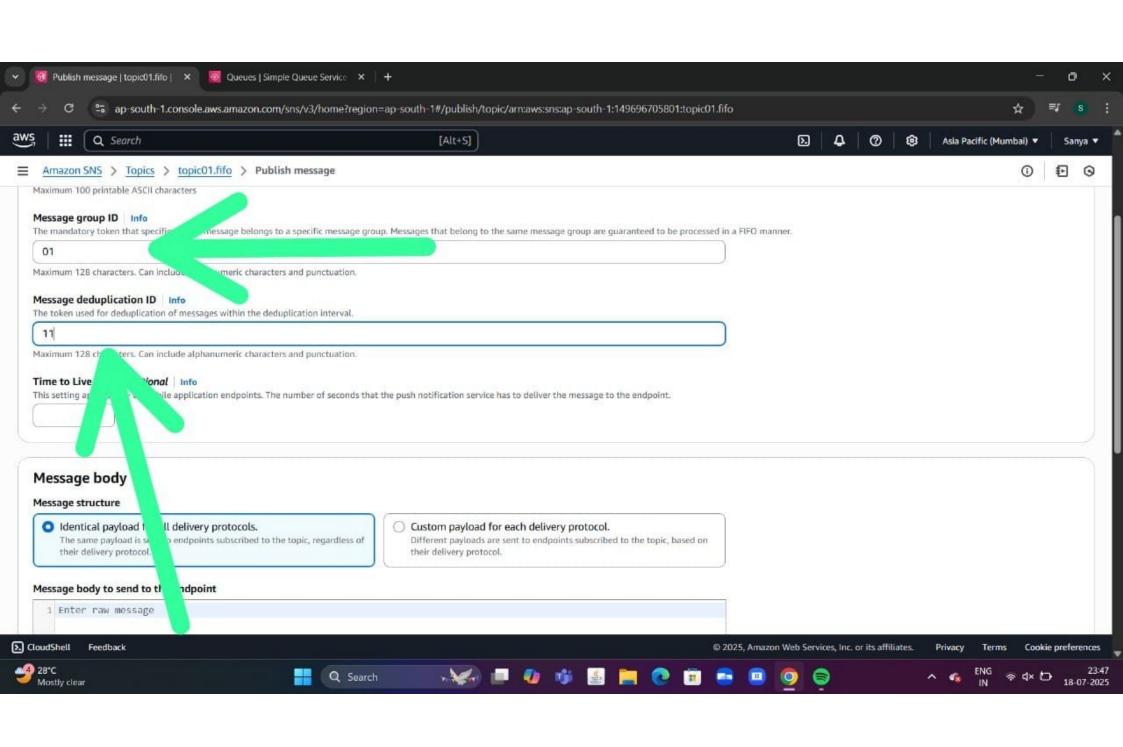


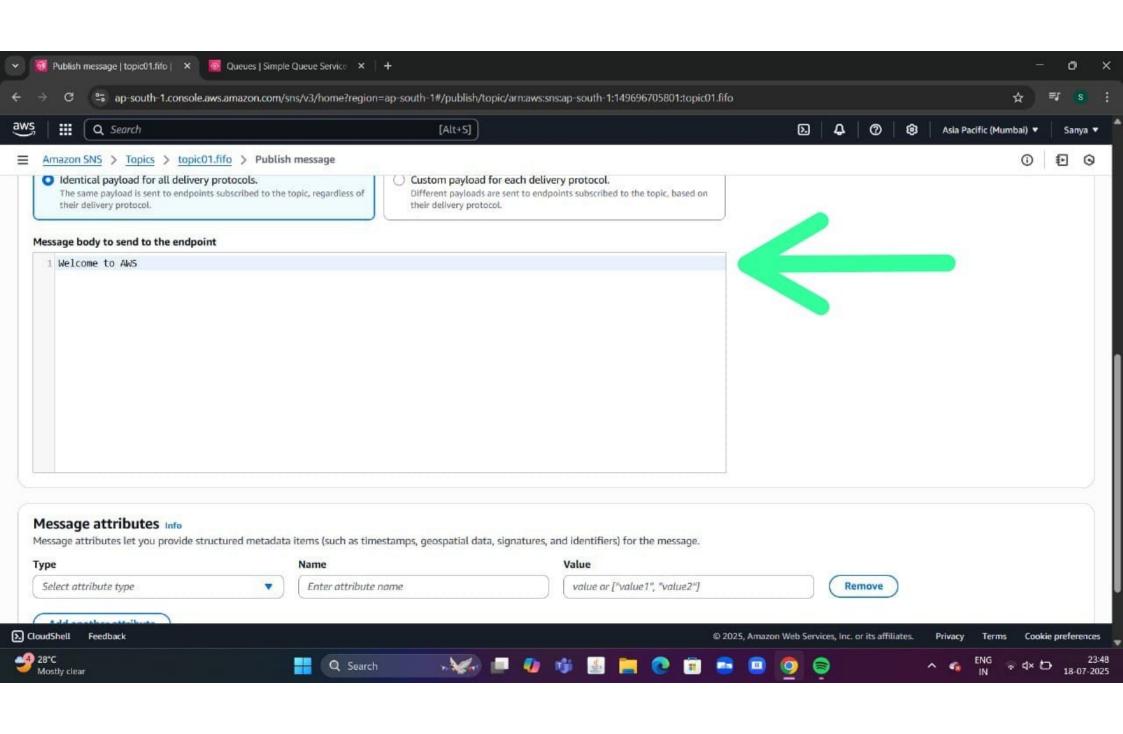


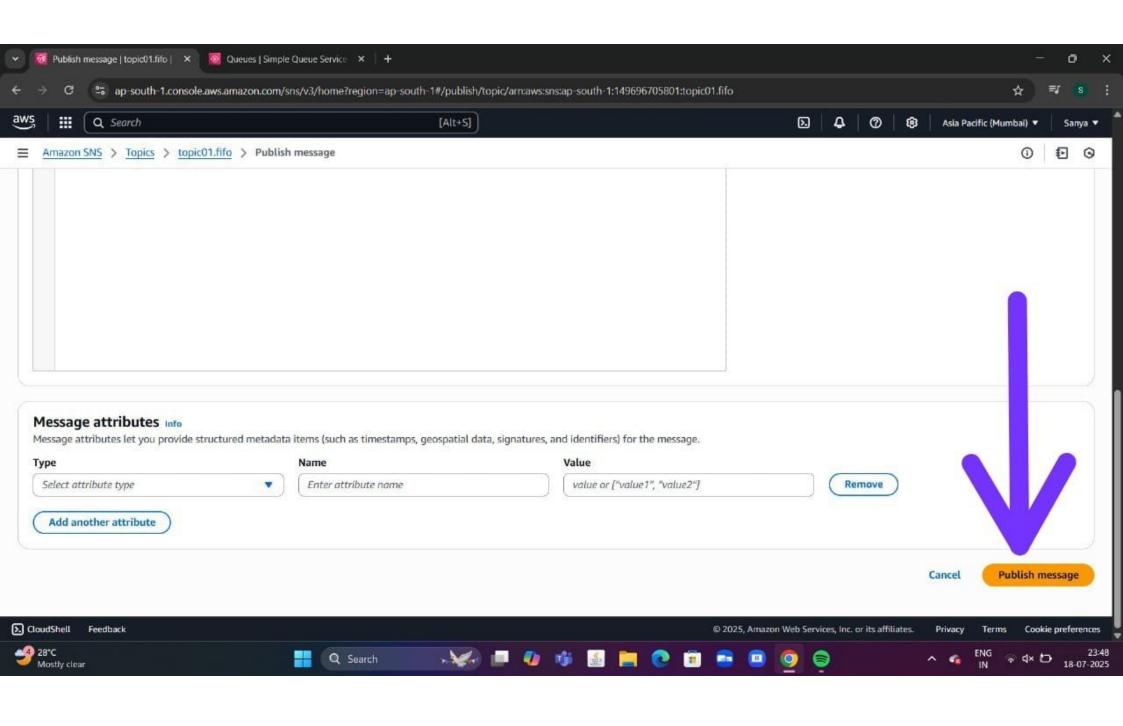


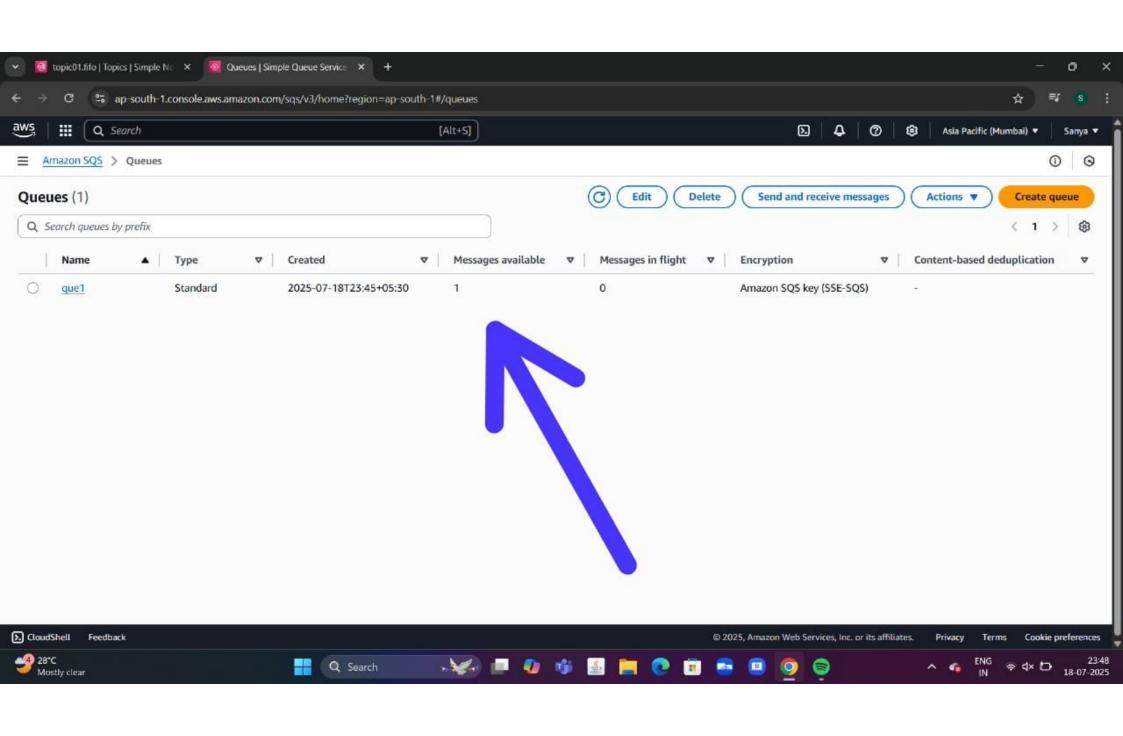


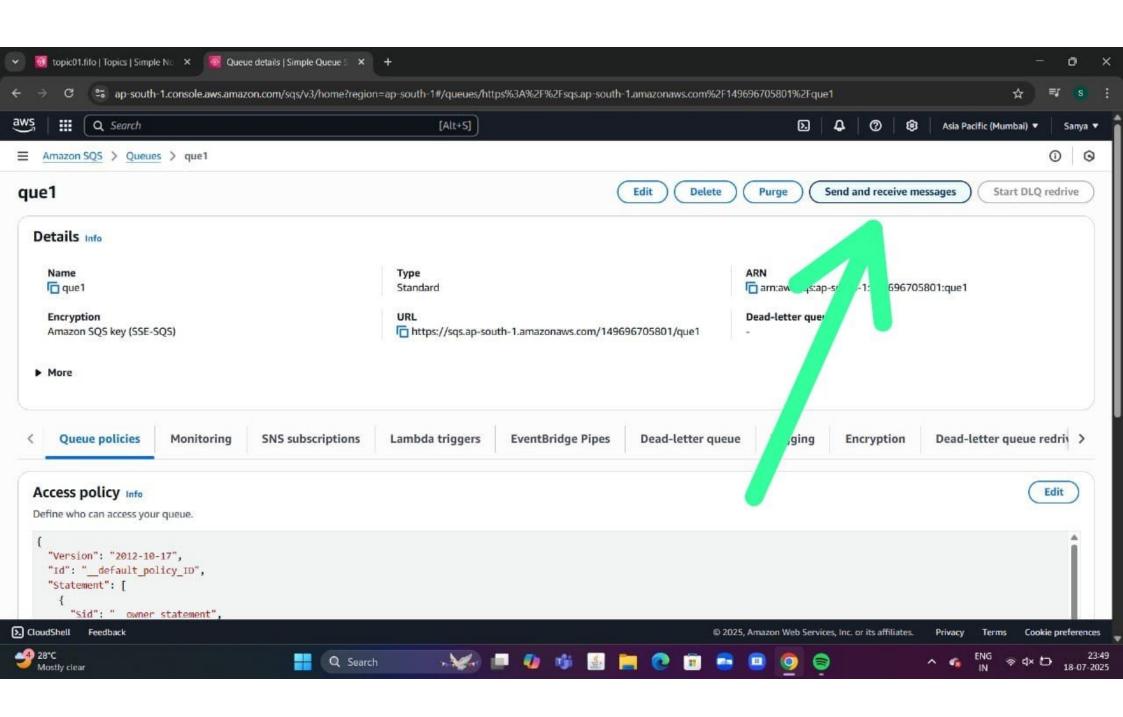


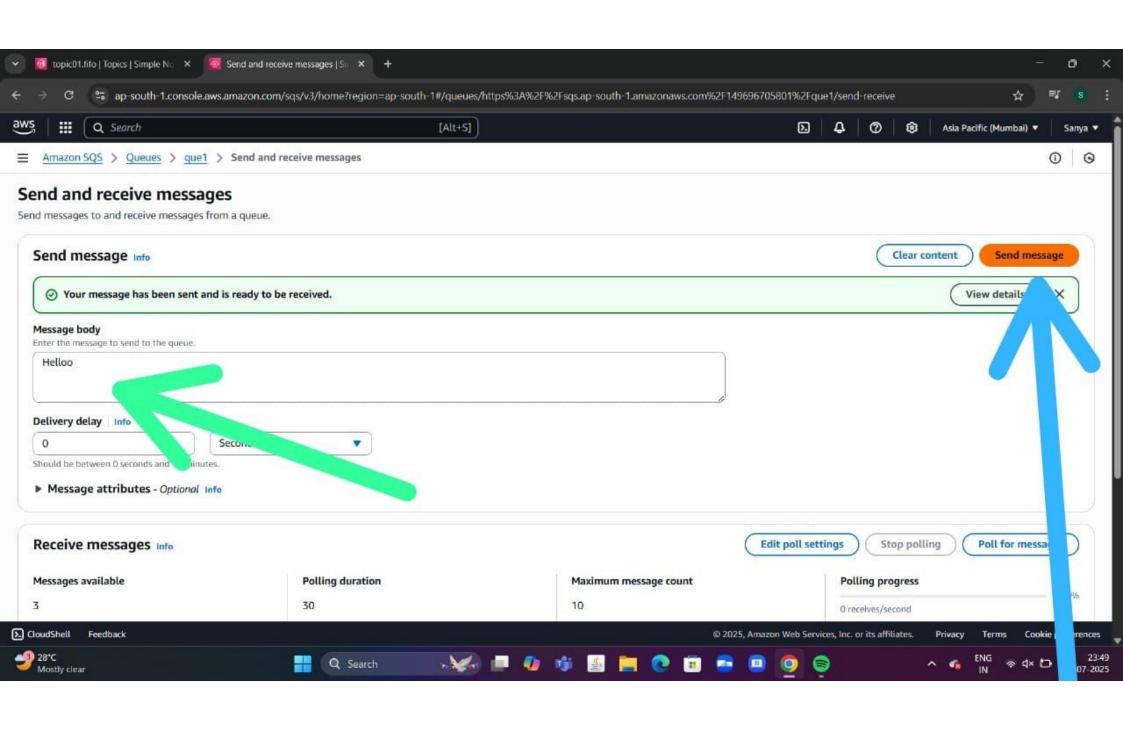






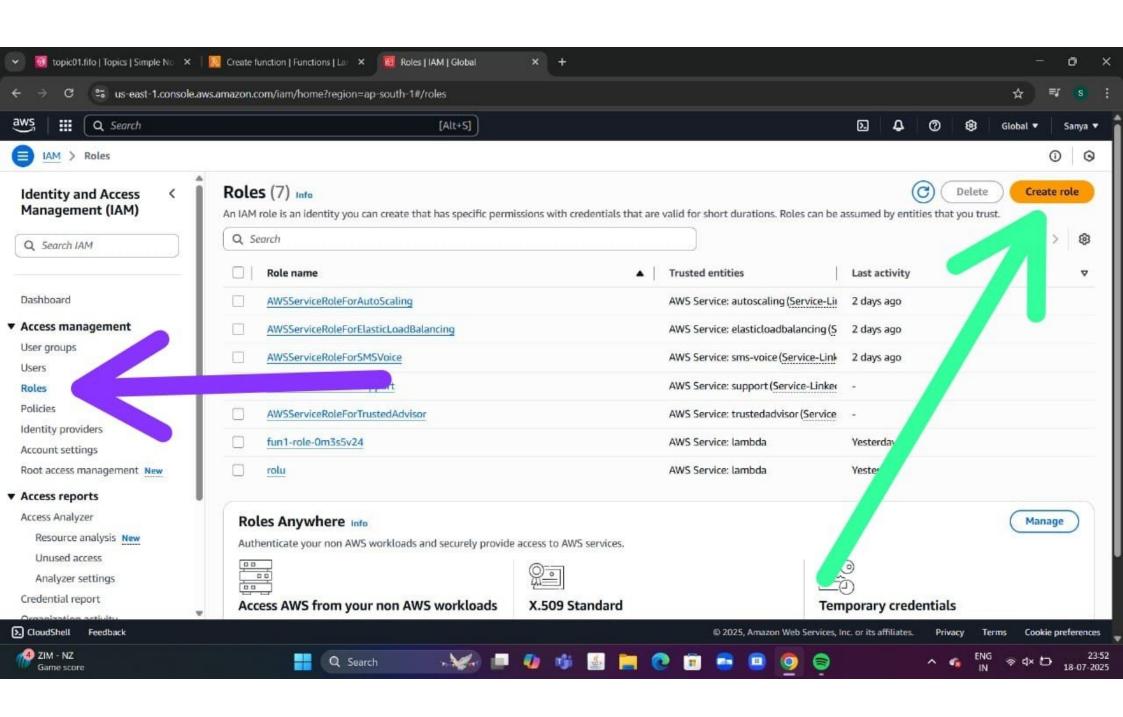






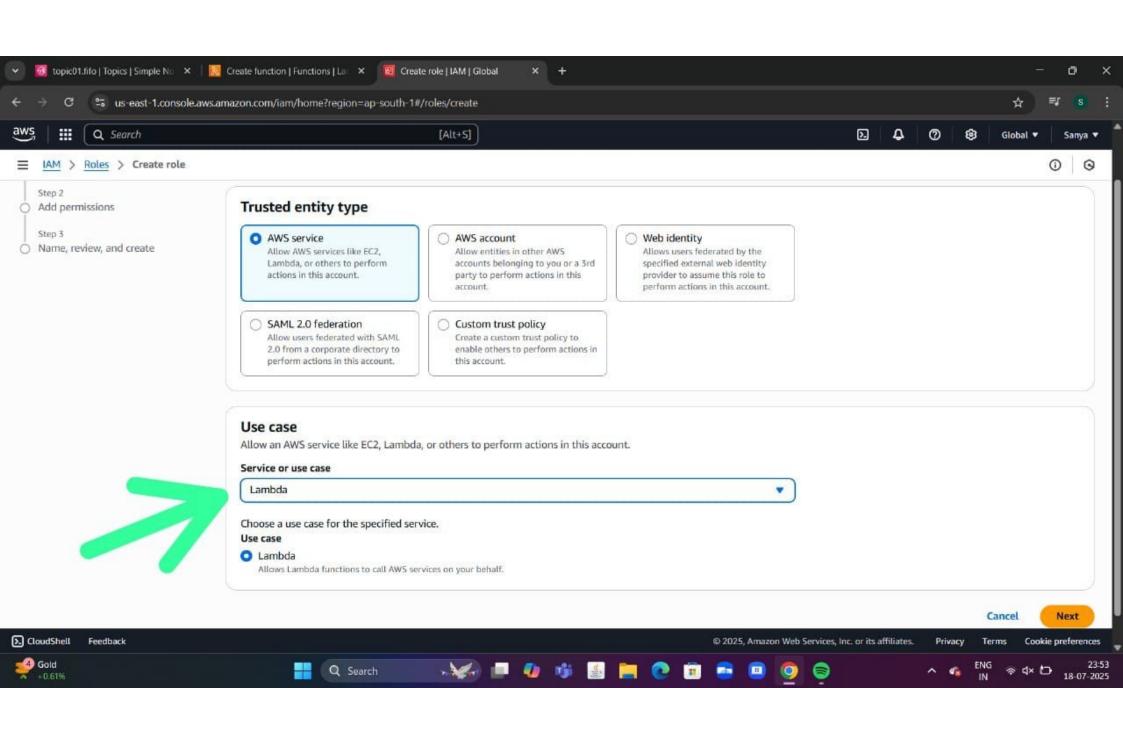
IAM :

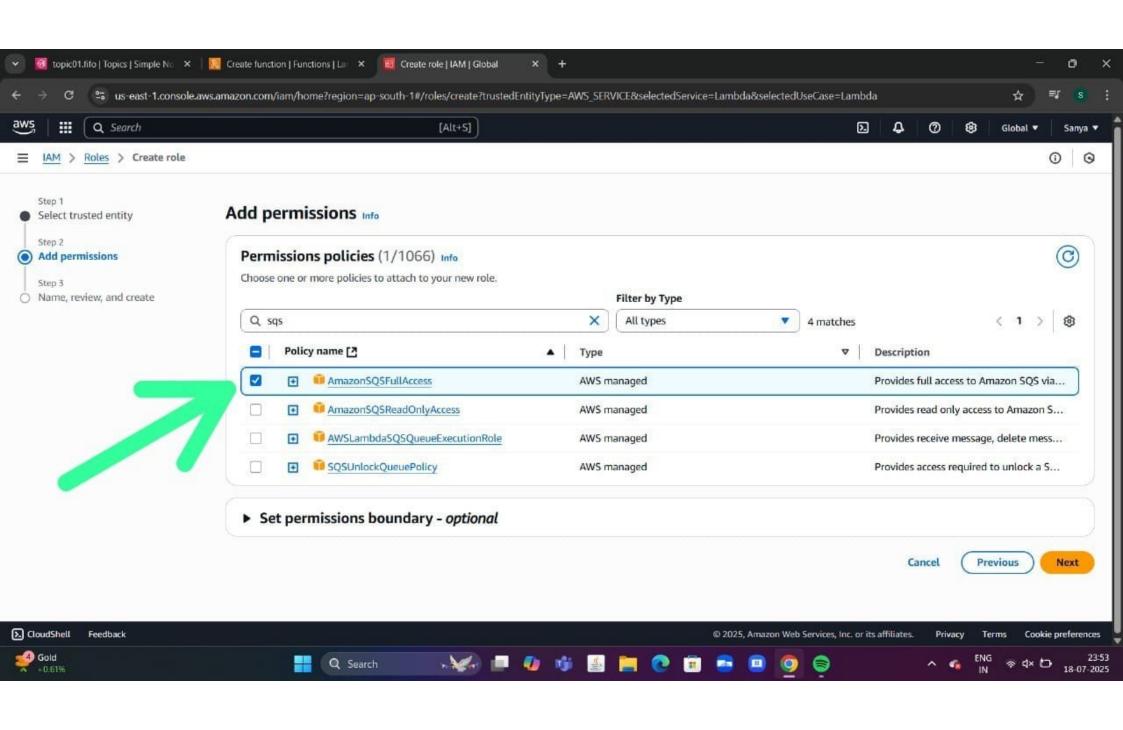
IAM (Identity and Access Management) in AWS is a service that helps to manage who can access our AWS resources and what they can do. We can create users, groups and roles, and assign permissions to control actions like viewing, editing, or deleting resources. It's an essential tool for keeping our AWS account secure, organized, and under control.

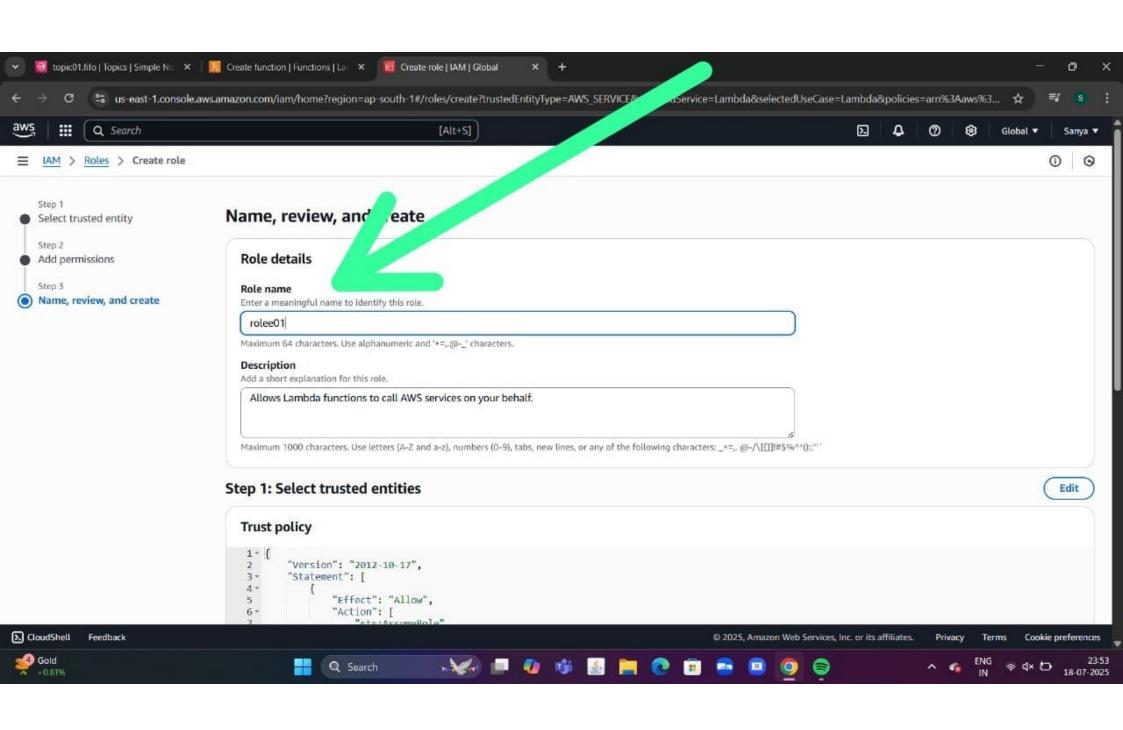


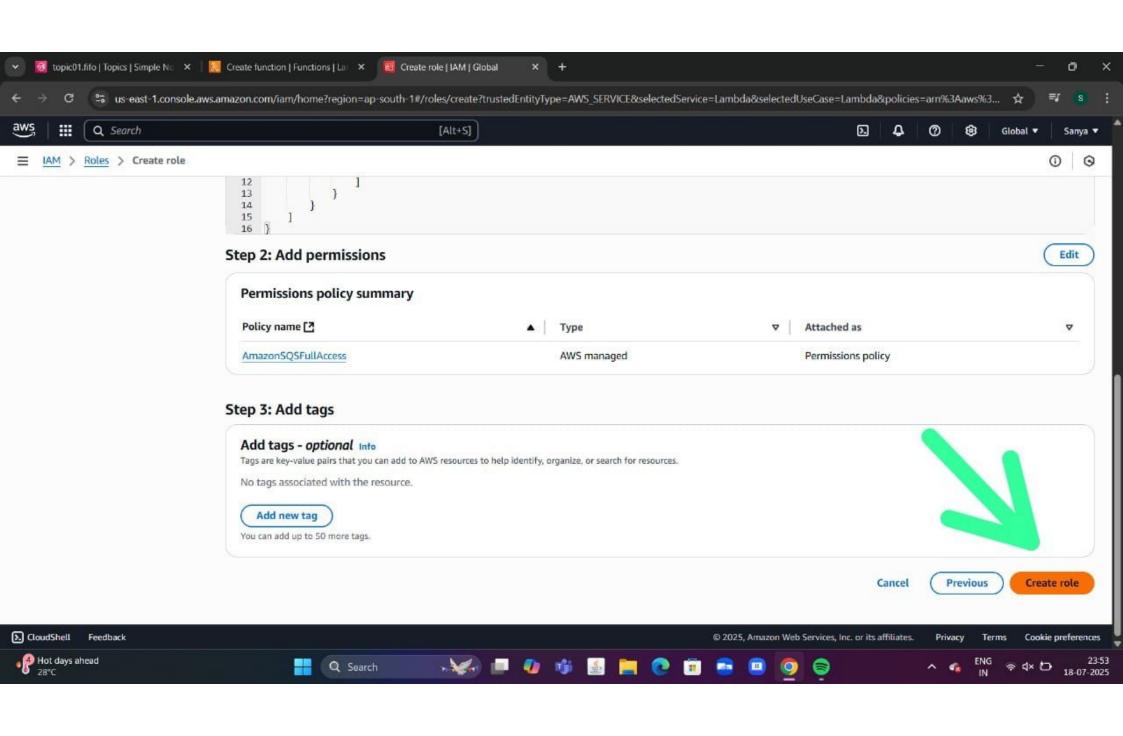
ROLES:

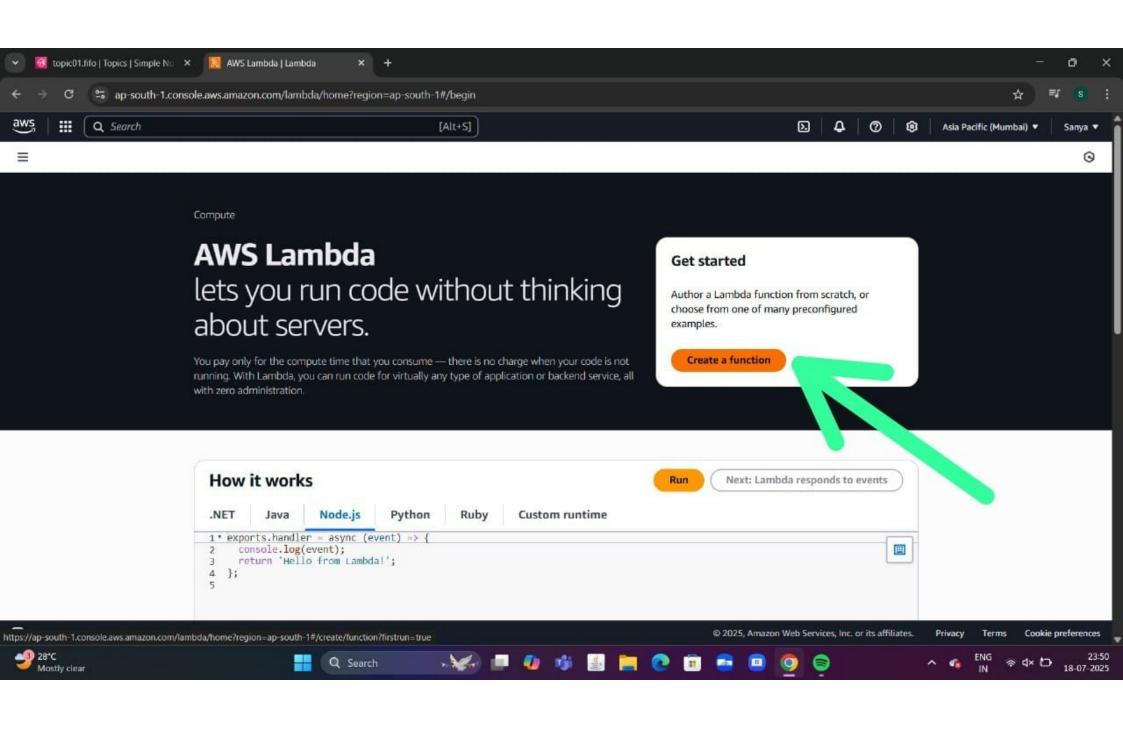
In AWS, ROLES are used to allow services like Lambda to securely access other AWS resources, such as SQS. When a Lambda function is triggered by an SQS queue, it needs an IAM role with the right permissions to read and delete messages from that queue. Instead of using passwords or access keys, the role is assumed temporarily by the function, making the process secure and efficient. Roles help different AWS services work together safely without exposing sensitive credentials.





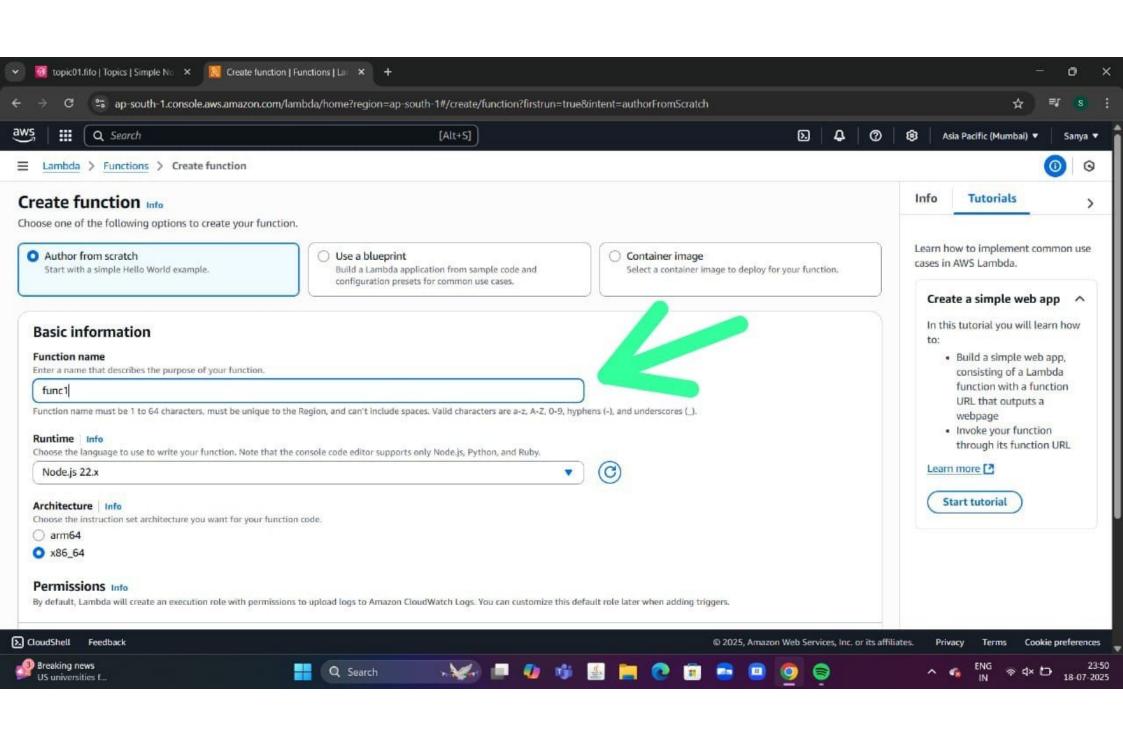


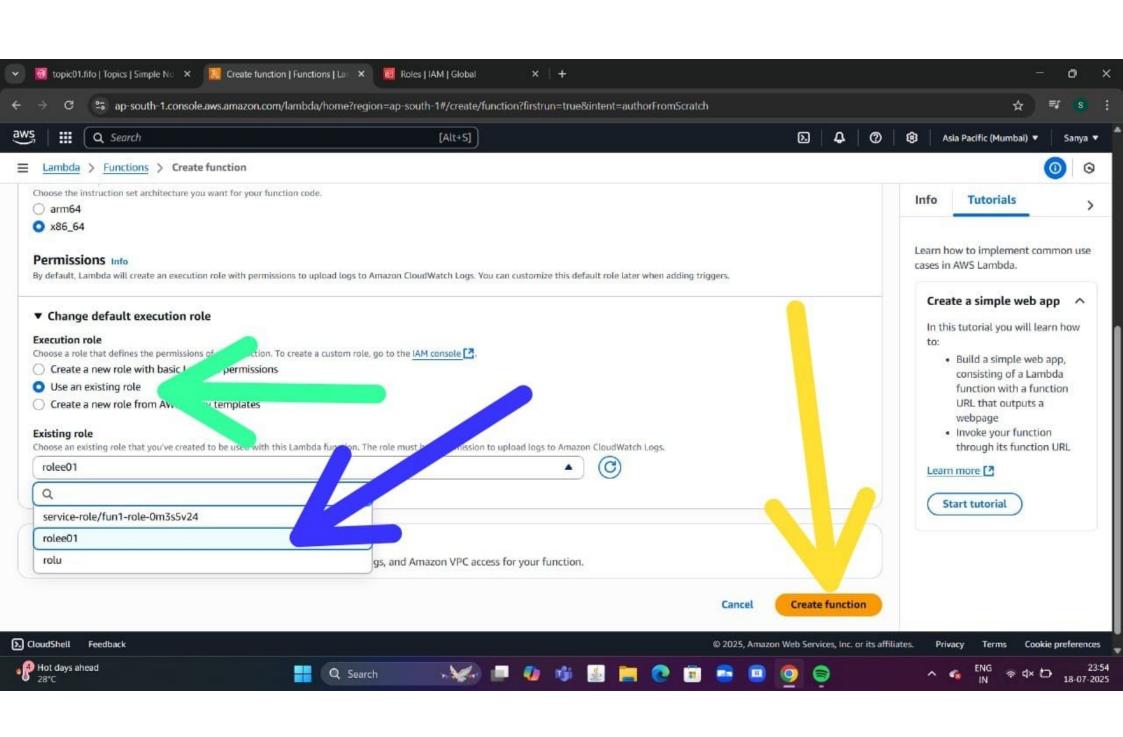


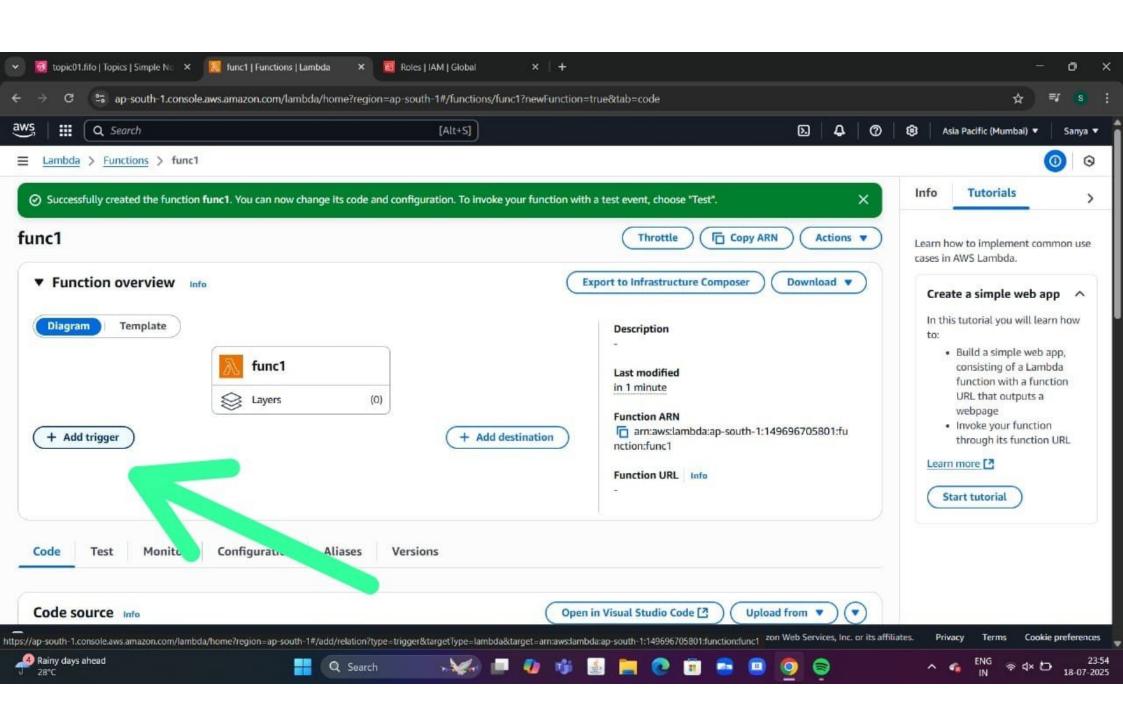


LAMBDA FUNCTION:

An AWS Lambda function let the code run automatically when something happens, like a user uploads a file or clicks a button on a website. We don't need to set up or manage any servers—just write the code, choose what should trigger it, and AWS takes care of the rest. It runs only when needed and we pay only for the time it runs.







TRIGGER:

In AWS, a TRIGGER in a Lambda function is an event source that automatically starts the function when a specific action occurs. Instead of calling the function manually, the trigger tells Lambda when to run, based on events from services like S3, SQS, API Gateway, DynamoDB, or CloudWatch. Triggers make Lambda functions event-driven, allowing them to respond instantly and automatically to changes or activities within your AWS environment.

