Tell me few use cases of AWS SES in Devops ?

1. What is Amazon SES?
Amazon **Simple Email Service (SES)** is a **cloud-based email sending service** that allows you to:

- Send **transactional emails** (e.g., order confirmations, password resets).
- Send **marketing/bulk emails** (e.g., newsletters, promotions).
- Receive and process incoming emails.

It's **scalable, cost-effective, and reliable** because it's built on Amazon's infrastructure.
👉 Think of it as Amazon's **professional email delivery system** for applications, similar to Gmail/Outlook, but meant for apps & systems, not humans.

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2. Typical Use Cases of SES
General (Non-DevOps):

- Sending **welcome emails** when a user signs up.
- Notifying customers of **shipping updates**.
- Sending **marketing campaigns**.

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3. DevOps Context Use Cases
In DevOps, SES is valuable for **automated system notifications** where email is needed instead of SMS/Slack.
✅ **Use Case 1: CI/CD Pipeline Notifications**

- After a **deployment completes (success/failure)**, send an **email report** via SES.
- Example: Jenkins/CodePipeline job → Lambda → SES → sends email to developers.

✅ **Use Case 2: Monitoring & Alerting**

- CloudWatch Alarm → Lambda function → send **custom email alert** using SES.
- Example: If disk usage > 90%, SES sends an email with **log file attachments** to Ops team.
- Unlike SNS (which is broad notification), SES is used when you need a **detailed email report**.

✅ **Use Case 3: Automated Log or Report Sharing**

- Every day/week, generate a **deployment summary report** or **system health report** (via Lambda/EC2 script).

- Use SES to email that report (PDF, CSV, JSON) to the team.

✅ **Use Case 4: Incident Management**
- When a **production issue** occurs, SES can automatically:
  - Email a **post-mortem template**.
  - Send **ticket creation details** to a Jira email endpoint.

✅ **Use Case 5: Security Alerts**
- If someone logs into AWS root account (captured by CloudTrail + CloudWatch Event),
- Trigger SES to **email the security team immediately** with details.

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4. Analogy
If SNS is like a **loudspeaker** (everyone hears the alert at once),
then SES is like **sending a detailed letter with all information** to the right people.

✅ **Beginner takeaway:**
- **Amazon SES = send automated emails from systems.**
- **DevOps uses = deployment notifications, monitoring alerts, reports, security alerts.**

<mark>Which of the following best describes SES compared to Gmail/Outlook?</mark>
a) SES is designed for human-to-human email communication
b) SES is designed for applications and systems to send automated emails
c) SES is only used for sending SMS
d) SES is mainly a cloud storage service for email data
✅ **Answer:** b) SES is designed for applications and systems to send automated emails

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<mark>Which of these is a valid general (non-DevOps) use case of SES?</mark>
a) Sending welcome emails when a user signs up
b) Broadcasting SMS alerts to multiple users
c) Running a queue system for background jobs
d) Hosting a web application
✅ **Answer:** a) Sending welcome emails when a user signs up

<mark>In DevOps, when would you use **SES** instead of SNS?</mark>
a) When you need detailed email reports with attachments instead of broad alerts
b) When you want to broadcast deployment alerts to Slack and SMS
c) When you want point-to-point messaging between microservices
d) When you want to push metrics into CloudWatch
✅ **Answer:** a) When you need detailed email reports with attachments instead of broad alerts