AWS Console – Documentation

1) Create an S3 bucket (Console + CLI)

Console steps (easy):

1) Sign in to the AWS Console → Services → **S3**.
2) Click **Create bucket**.
3) Bucket name: must be globally unique (e.g., yourname-unique-bucket-2025).
4) Region: pick the same region you're using for EC2/Lambda (e.g., us-east-1).
5) Uncheck "Block all public access" **only** if you intend to make objects public (not recommended). By default, keep public access blocked.
6) (Recommended) In **Default encryption** choose **AES-256** (SSE-S3).
7) Click **Create bucket**.

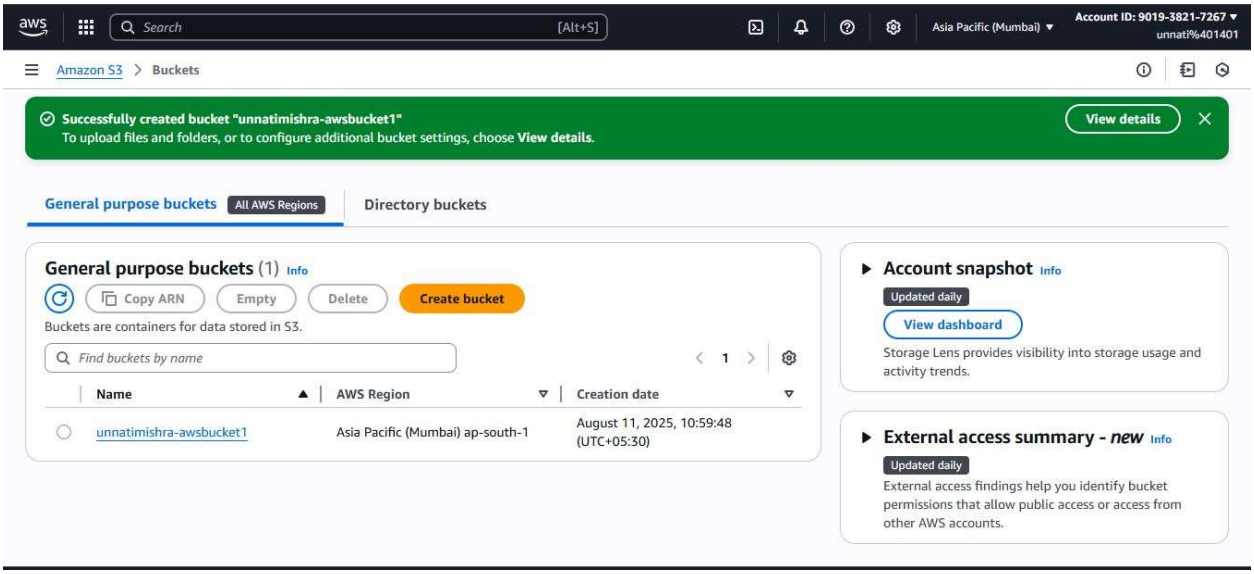

Fig1: S3 Bucket Created

2) Launch an EC2 instance (free-tier eligible)

Goal: Launch a t2.micro or t3.micro (free-tier) instance, SSH in, run a Python script.
Console steps

1. Console → Services → **EC2 → Instances → Launch instances**.
2. **Choose AMI**: Select **Amazon Linux 2 AMI (HVM)** (Free tier eligible).
3. **Choose Instance Type**: pick t2.micro (or t3.micro) — free-tier eligible.

4. **Key pair (login)**: Create a new key pair (RSA). Download the .pem file and keep it safe.
    - If you already have a key pair, you can use it.
5. **Network settings / Security group**:
    - Allow **SSH (port 22)** — restrict source to **My IP** (recommended) or a safe IP range.
    - If you want a web page, add **HTTP (port 80)**.
6. **Storage**: default 8 GB EBS is okay (free-tier includes some EBS).
7. Click **Launch instance**.

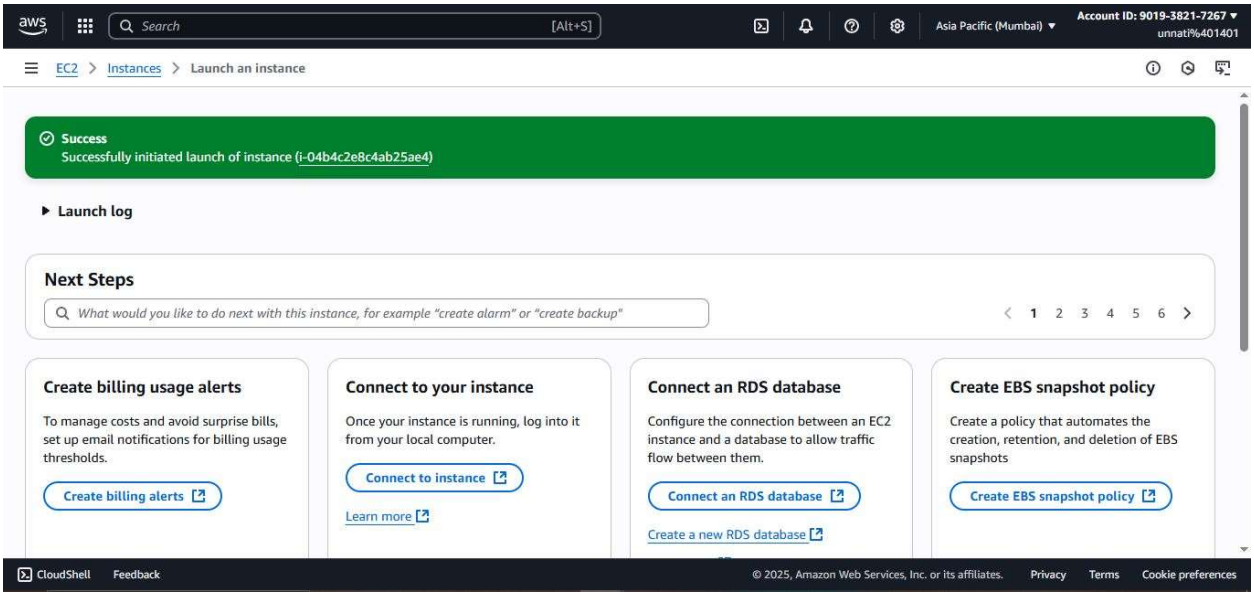

Fig2: EC2 Instance Created

3) Deploy to AWS Lambda — step-by-step

1) Open the **Lambda console → Functions → Create function → Author from scratch**.
2) Enter a name (e.g., `calculator`), pick runtime (e.g., `Python 3.13` or `python3.13`), choose or create an execution role (see IAM role below), then Create. AWS Documentation
3) In the function page, under **Code**, choose **Upload from →** `.zip file` and upload the `function.zip` you downloaded. Set handler to `lambda_function.lambda_handler`. Save.
4) Configure a test event (JSON) in the console, e.g.:

```json
{
  "operation": "add",
  "a": 2,
  "b": 3
}
```

5) Click **Test** — see the result and logs (CloudWatch).

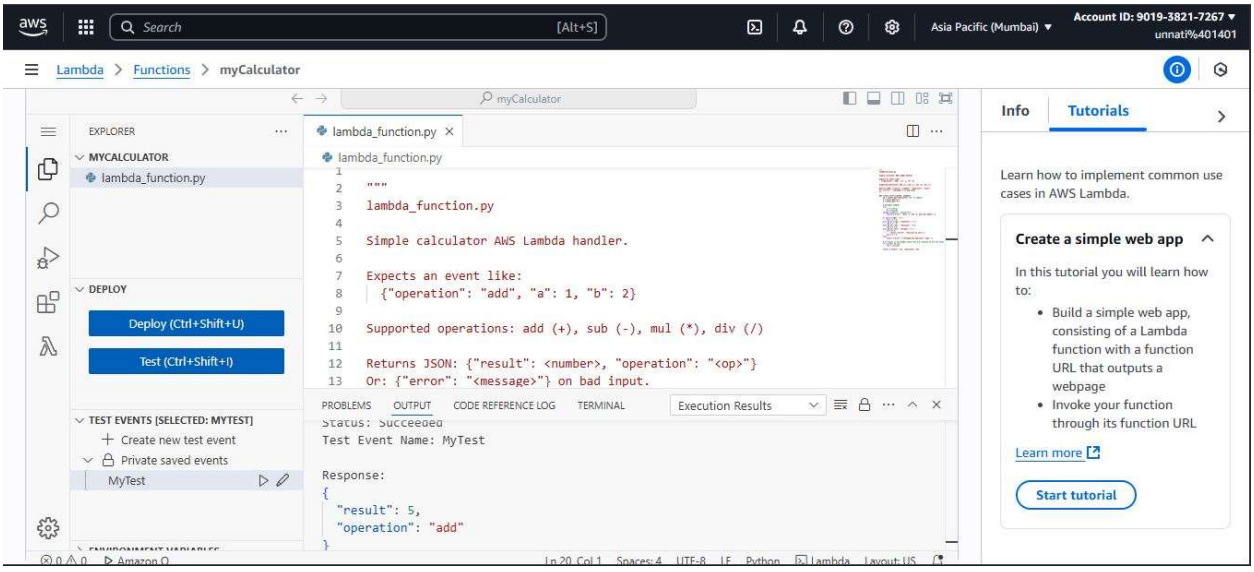

Fig3: Python Code Deployed Using Lambda