1. AWS CLI Configuration

🔹 **Command:**

- **AWS Access Key ID** → Example: AKIAIOSFODNN7EXAMPLE
- **AWS Secret Access Key** → Example: wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY
- **Default region name** → Example: us-east-1 or ap-south-1
- **Default output format** → Example: json (or text, yaml)

✅ **Result:**

This stores your credentials in:

- ~/.aws/credentials
- ~/.aws/config

☁️ **2. S3 (Simple Storage Service)**

🔹 **Create a Bucket**

aws s3 mb s3://your-bucket-name

🔹 **List Buckets**

aws s3 ls

🔹 **Upload a File**

aws s3 cp myfile.txt s3://your-bucket-name/

🔹 **Download a File**

aws s3 cp s3://your-bucket-name/myfile.txt .

🔹 **Sync Folder to S3**

aws s3 sync ./local-folder s3://your-bucket-name/

🔹 **Delete a File from S3**

aws s3 rm s3://your-bucket-name/myfile.txt

🔹 **Delete Bucket with Force**

aws s3 rb s3://your-bucket-name --force

🖥️ 3. EC2 (Elastic Compute Cloud)

🔹 Find Amazon Linux 2 AMI ID

aws ec2 describe-images --owners amazon --filters "Name=name,Values=amzn2-ami-hvm-*-x86_64-gp2"

🔹 Launch an EC2 Instance

aws ec2 run-instances --image-id ami-0abcdef1234567890 --instance-type t2.micro --key-name MyKeyPair --security-group-ids sg-0123456789abcdef0 --subnet-id subnet-0123456789abcdef0 --count 1

🔹 Describe All EC2 Instances

aws ec2 describe-instances

🔹 Start an Instance

aws ec2 start-instances --instance-ids i-1234567890abcdef0

aws ec2 stop-instances --instance-ids i-1234567890abcdef0

🔹 Terminate an Instance

aws ec2 terminate-instances --instance-ids i-1234567890abcdef0

🔐 4. Security Groups

🔹 Create a Security Group

aws ec2 create-security-group --group-name MySecurityGroup --description "My security group"

🔹 Describe Security Groups

aws ec2 describe-security-groups

🔹 Add Ingress Rule for SSH

aws ec2 authorize-security-group-ingress --group-id sg-0123456789abcdef0 --protocol tcp --port 22 --cidr 0.0.0.0/0

🔹 Add Ingress Rule for HTTP

aws ec2 authorize-security-group-ingress --group-id sg-0123456789abcdef0 --protocol tcp --port 80 --cidr 0.0.0.0/0

🔑 5. Key Pairs

🔹 Create a Key Pair

aws ec2 create-key-pair --key-name MyKeyPair --query 'KeyMaterial' --output text > MyKeyPair.pem

🔹 Describe Existing Key Pairs

aws ec2 describe-key-pairs

🧹 6. Cleanup Commands

🔹 Terminate an EC2 Instance

aws ec2 terminate-instances --instance-ids i-1234567890abcdef0

🔹 Delete a Security Group

aws ec2 delete-security-group --group-id sg-0123456789abcdef0

🔹 Delete a Key Pair

aws ec2 delete-key-pair --key-name MyKeyPair

🔍 7. Bonus Queries & Output Customization

aws sts get-caller-identity

🔹 Show Instances with Output Format

aws ec2 describe-instances --output json

🔹 Get Only Instance IDs

aws ec2 describe-instances --query "Reservations[*].Instances[*].InstanceId" --output text

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