Setup AWS CLI and AWS access from python boto library

1. Create Access Key ID & Secret Access Key in AWS Console UI

To generate these, you need to go to the **IAM (Identity and Access Management)** section.

Steps:

1. Go to https://console.aws.amazon.com/iam/
2. On the left sidebar, click **Users**
3. Click your username (the one you're logged in as)
4. Go to the **Security credentials** tab
5. Scroll down to **Access keys** section
6. Click **Create access key**
7. Choose **Command Line Interface (CLI)** as the use case and click **Next**
8. Click **Create access key**
9. **Copy the Access Key ID and Secret Access Key** — save them securely. You won't be able to see the Secret again.

Note: You must have permissions to create access keys. If this option is greyed out, you may need to ask your AWS admin.

2. Note the Default Region

- Pick the AWS region where you primarily operate (e.g., us-east-1, ap-south-1, etc.)
- If unsure, look at the region dropdown in the top-right corner of your console UI — that is your current region.

Example:

us-east-1 (N. Virginia)

ap-south-1 (Mumbai)

3. Download the AWS CLI Client

Windows:

https://awscli.amazonaws.com/AWSCLIV2.msi

Test:

From command prompt:

aws –version

aws configure

Specify the requested information:

AWS Access Key ID

AWS Secret Access Key

Default region (e.g., us-east-1)

Default output format (e.g., json)

4. Install the boto library

In VS Code, activate the virtual environment,

pip install boto3

5. Python code to test AWS access

Create a python file test_aws.py with following code:

```
import boto3
from botocore.exceptions import NoCredentialsError, PartialCredentialsError, ClientError


def test_aws_login():
  try:
    sts_client = boto3.client('sts')
    identity = sts_client.get_caller_identity()
    print("Successfully authenticated to AWS.")
    print(f"Account: {identity['Account']}")
    print(f"User ARN: {identity['Arn']}")
    print(f"User ID: {identity['UserId']}")
```

```
    except NoCredentialsError:
        print(" No AWS credentials found. Please run `aws configure` or set env variables.")
    except PartialCredentialsError:
        print(" Incomplete AWS credentials found.")
    except ClientError as e:
        print(f"AWS Client Error: {e}")
    except Exception as e:
        print(f"Unknown Error: {e}")

if __name__ == "__main__":
    test_aws_login()
```