**Lab 2: Basic Python Script to Interact with AWS Services**

**Introduction to Boto3:**

Boto3 is the Amazon Web Services (AWS) SDK for Python. It allows you to interact with various AWS services programmatically. You can find the official Boto3 documentation here: [Boto3 Documentation](https://boto3.amazonaws.com/v1/documentation/api/latest/index.html)

**AWS SDK and Its Relevance in Automation:**

AWS SDKs, including Boto3 for Python, are essential for automating tasks and interacting with AWS services. They provide a convenient way to access AWS resources, manage configurations, and perform various operations programmatically. AWS SDKs are crucial for cloud automation, infrastructure as code (IaC), and building AWS-based applications.

**=>** Write a Python script using Boto3 to list all your S3 buckets

**Task1: Install and configure boto3**

**1.1: Install boto3**

Command: pip install boto3

**1.2: Aws Cli Installation and Configuration**

**1.2.1: Aws cli installation:**

**Command1:** curl "https://awscli.amazonaws.com/awscli-exe-linux-x86\_64.zip" -o "awscliv2.zip"

**Command2:** unzip awscliv2.zip

**Command3:** sudo ./aws/install

**1.2.2: aws configure**:

**Command1**: aws configure(after running this command you would be asked to input your access key and security key along with your default region

**Task 2: Write a Python Script to List S3 Buckets**

Create any python file then open it through vim editor or any other editor of you choice, press **i** to insert elements in it. After that write the below code in the file

import boto3

# Create an S3 client

s3 = boto3.client('s3')

# List all S3 buckets

response = s3.list\_buckets()

print("List of S3 Buckets:")

for bucket in response['Buckets']:

print(f"- {bucket['Name']}")

After this run python3 YourFilename.py