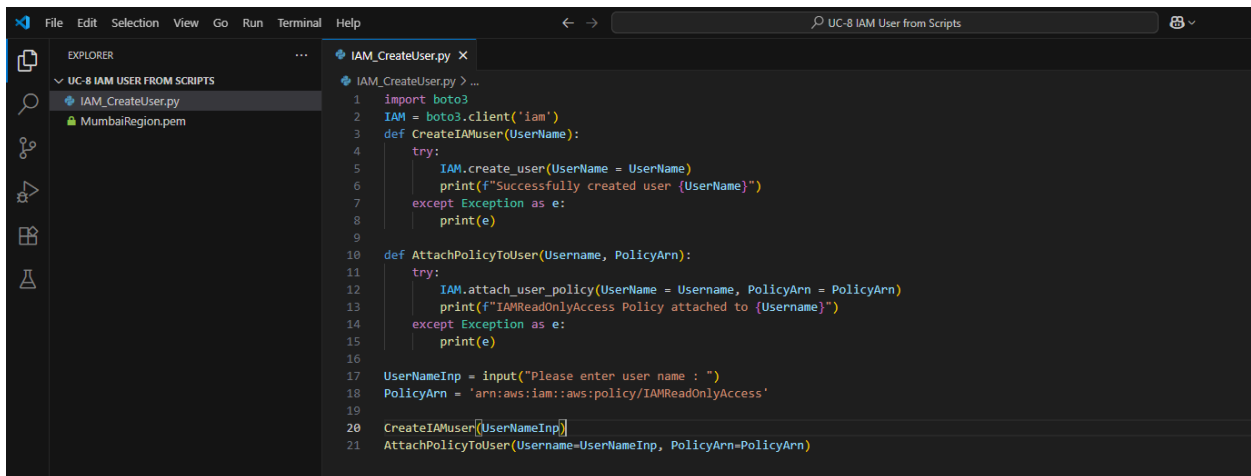


## Use case

### Create IAM users and attach policies programmatically

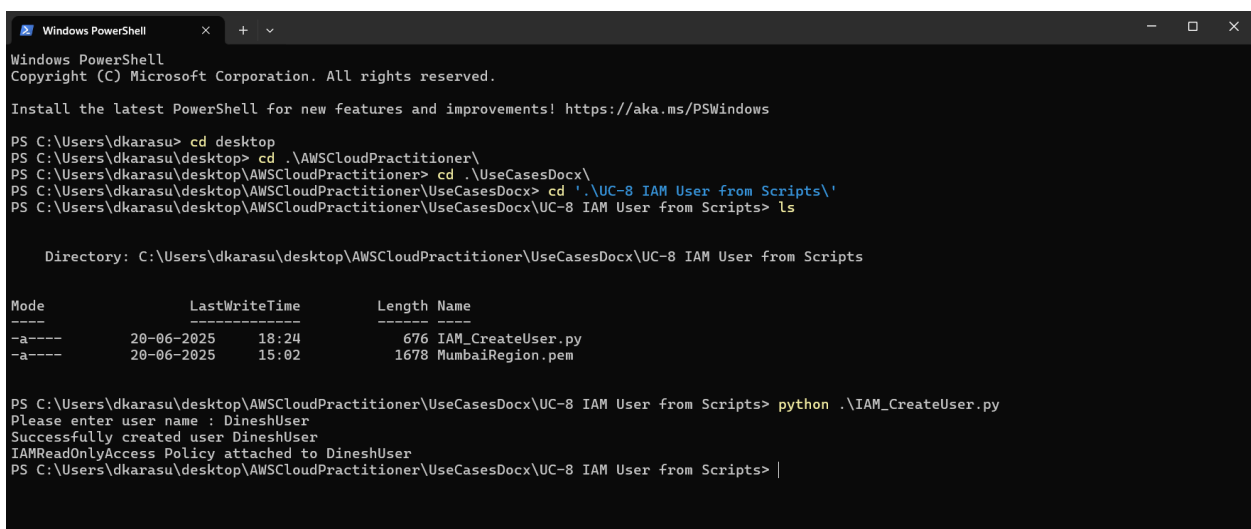
1. Get the roles ( IAM CreateUser, IAM AttachUserPolicy ) for the account you want to use for IAM user creation and attaching policies.
2. Navigate to the python console and write logic to create a user and assign policy



The screenshot shows a VS Code editor with a file explorer on the left and a code editor on the right. The file explorer shows a folder named 'UC-8 IAM USER FROM SCRIPTS' containing two files: 'IAM\_CreateUser.py' and 'MumbaiRegion.pem'. The code editor shows the contents of 'IAM\_CreateUser.py', which is a Python script for creating an IAM user and attaching a policy.

```
1 import boto3
2 IAM = boto3.client('iam')
3 def CreateIAMUser(Username):
4     try:
5         IAM.create_user(Username = Username)
6         print(f"Successfully created user {Username}")
7     except Exception as e:
8         print(e)
9
10 def AttachPolicyToUser(Username, PolicyArn):
11     try:
12         IAM.attach_user_policy(Username = Username, PolicyArn = PolicyArn)
13         print(f"IAMReadOnlyAccess Policy attached to {Username}")
14     except Exception as e:
15         print(e)
16
17 UsernameInp = input("Please enter user name : ")
18 PolicyArn = 'arn:aws:iam::aws:policy/IAMReadOnlyAccess'
19
20 CreateIAMUser(UsernameInp)
21 AttachPolicyToUser(Username=UsernameInp, PolicyArn=PolicyArn)
```

3. RUN the python code from CLI and verify user in AWS Console



The screenshot shows a Windows PowerShell terminal window. The user has navigated to the directory 'C:\Users\dkarasu\desktop\AWSCloudPractitioner\UseCasesDocx\UC-8 IAM User from Scripts' and executed the command 'python .\IAM\_CreateUser.py'. The output shows that the user 'DineshUser' was successfully created and the 'IAMReadOnlyAccess' policy was attached to it.

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\dkarasu> cd desktop
PS C:\Users\dkarasu\desktop> cd .\AWSCloudPractitioner\
PS C:\Users\dkarasu\desktop\AWSCloudPractitioner> cd .\UseCasesDocx\
PS C:\Users\dkarasu\desktop\AWSCloudPractitioner\UseCasesDocx> cd '.\UC-8 IAM User from Scripts\'
PS C:\Users\dkarasu\desktop\AWSCloudPractitioner\UseCasesDocx\UC-8 IAM User from Scripts> ls

Directory: C:\Users\dkarasu\desktop\AWSCloudPractitioner\UseCasesDocx\UC-8 IAM User from Scripts

Mode                LastWriteTime         Length Name
----                -
-a----             20-06-2025   18:24             676 IAM_CreateUser.py
-a----             20-06-2025   15:02            1678 MumbaiRegion.pem

PS C:\Users\dkarasu\desktop\AWSCloudPractitioner\UseCasesDocx\UC-8 IAM User from Scripts> python .\IAM_CreateUser.py
Please enter user name : DineshUser
Successfully created user DineshUser
IAMReadOnlyAccess Policy attached to DineshUser
PS C:\Users\dkarasu\desktop\AWSCloudPractitioner\UseCasesDocx\UC-8 IAM User from Scripts> |
```

aws [Search] [Alt+S] Global aws-dineshkarasu (7704-2476-7712) dominic

Identity and Access Management (IAM) Search IAM

Dashboard

Access management

- User groups
- Users**
- Roles
- Policies

Information: aws:iam:users

### Users (2) Info

An IAM user is an identity with long-term credentials that is used to interact with AWS in an account.

Search

<input type="checkbox"/>	User name	Path	Group	Last activity	MFA	Password age	Console last sign-in	Access key ID	Active key age	Access key last used
<input type="checkbox"/>	<a href="#">DineshUser</a>	/	0	-	-	-	-	-	-	-
<input type="checkbox"/>	<a href="#">dominic</a>	/	1	7 minutes ago	-	14 days	June 20, 2025, 12:47 (...)	Active - AKIA3GYHFAT...	14 days	7

aws-dineshkarasu (7704-2476-7712) dominic

### DineshUser Info

Summary

ARN: [arn:aws:iam::770424767712:user/DineshUser](#)

Console access: Disabled

Created: June 20, 2025, 18:27 (UTC+05:30)

Last console sign-in: -

Access key 1: [Create access key](#)

Permissions Groups Tags Security credentials Last Accessed

#### Permissions policies (1)

Permissions are defined by policies attached to the user directly or through groups.

Search Filter by Type All types

<input type="checkbox"/>	Policy name	Type	Attached via
<input type="checkbox"/>	<a href="#">IAMReadOnlyAccess</a>	AWS managed	Directly

Verified that the new user is created with given UserName and IAMReadOnlyAccess policy is attached to the user