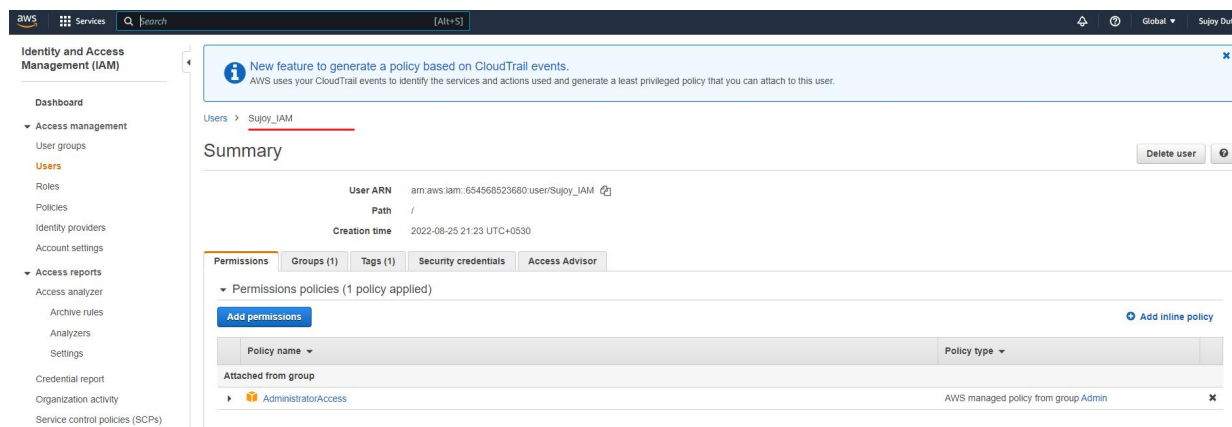


# Assignment sheet for IAM(Sujoy\_Dutta)

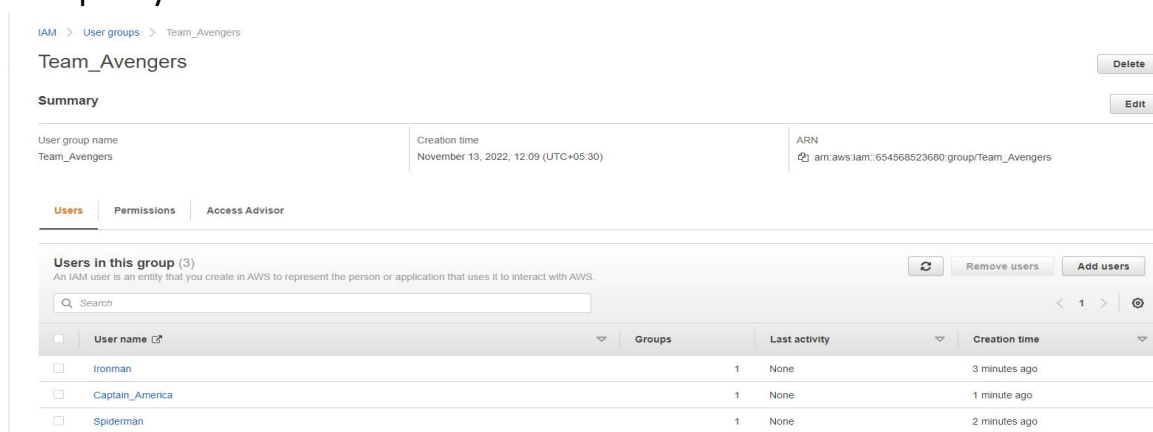
**Assignment 1 :-** Create an IAM user with username of your own wish and grant administrator policy.



The screenshot shows the AWS IAM console interface. The left sidebar contains navigation links for Identity and Access Management (IAM), including Dashboard, Access management, Users, Roles, Policies, Identity providers, Account settings, Access reports, Access analyzer, Archive rules, Analyzers, Settings, Credential report, Organization activity, and Service control policies (SCPs). The main content area displays the 'Summary' tab for the user 'Sujoy\_IAM'. It shows the User ARN as 'arn:aws:iam::654568523680:user/Sujoy\_IAM', the Path as '/', and the Creation time as '2022-08-25 21:23 UTC+0530'. Below this, the 'Permissions' tab is active, showing 'Permissions policies (1 policy applied)'. A table lists the attached policy: 'AdministratorAccess' from the group 'Admin'. There are buttons for 'Add permissions' and 'Add inline policy'.

**Assignment 2 :-** Hello students, in this assignment you need to prepare a developers team of avengers.

- Create 3 IAM users of avengers and assign them in developer's groups with IAM policy.



The screenshot shows the AWS IAM console interface for the 'Team\_Avengers' user group. The left sidebar is the same as in the previous screenshot. The main content area displays the 'Summary' tab for the group 'Team\_Avengers'. It shows the User group name as 'Team\_Avengers', the Creation time as 'November 13, 2022, 12:09 (UTC+05:30)', and the ARN as 'arn:aws:iam::654568523680:group/Team\_Avengers'. Below this, the 'Users' tab is active, showing 'Users in this group (3)'. A table lists the users in the group: 'Ironman', 'Captain\_America', and 'Spiderman'. Each user has a checkbox, a 'User name' link, a 'Groups' column showing '1', a 'Last activity' column showing 'None', and a 'Creation time' column showing '3 minutes ago', '1 minute ago', and '2 minutes ago' respectively. There are buttons for 'Remove users' and 'Add users'.

IAM > User groups > Team\_Avengers

## Team\_Avengers

Summary

User group name Team_Avengers	Creation time November 13, 2022, 12:09 (UTC+05:30)	ARN arn:aws:iam::654568523680:group/Team_Avengers
----------------------------------	---	--

Users | **Permissions** | Access Advisor

**Permissions policies (1)** [Info](#)  
You can attach up to 10 managed policies.

Filter policies by property or policy name and press enter.

<input type="checkbox"/>	Policy name <a href="#">?</a>	Type	Description
<input type="checkbox"/>	AdministratorAccess	AWS managed - job function	Provides full access to AWS services and resources.

**Assignment 3 :-** Define a condition in policy for expiration like

```
"DateGreaterThan": {"aws:CurrentTime":
```

```
"2020-04-01T00:00:00Z"},
```

```
"DateLessThan": {"aws:CurrentTime":
```

```
"2020-06-30T23:59:59Z"}
```

Define the span of 4 months as per your wish

Identity and Access Management (IAM)

- Dashboard
- Access management
  - User groups
  - Users
  - Roles
- Policies**
  - Identity providers
  - Account settings
- Access reports
  - Access analyzer
    - Archive rules
    - Analyzers
    - Settings
  - Credential report
  - Organization activity
  - Service control policies (SCPs)

Policies > Demo

## Summary

Policy ARN: arn:aws:iam::654568523680:policy/Demo

Description

Permissions | Policy usage | Tags | Policy versions | Access Advisor

Policy summary | {} JSON | Edit policy

```

1 {
2   "Version": "2012-10-17",
3   "Statement": [
4     {
5       "Effect": "Allow",
6       "Action": "*",
7       "Resource": "*",
8       "Condition": {
9         "DateGreaterThan": {
10          "aws:CurrentTime": "2022-11-01T00:00:00Z"
11        },
12        "DateLessThan": {
13          "aws:CurrentTime": "2023-03-30T23:59:59Z"
14        }
15      }
16    }
17  ]
18 }
```

**Assignment 3 :-** Prepare 15 authentic MCQ questions related to IAM.

Questions:-

- Which is the most secure way of giving access to AWS services to applications running on Ec2 instances?
- What are least-privilege permissions in IAM?
- How many maximum groups can be created in an AWS account?
- IAM policy documents are written in which format?
- Which IAM resource can be reused across multiple identities?
- Does EC2 support resource-based policies?

7. What is the default level of access a newly created IAM User is granted?
8. Are Organizational Units a component of IAM?
9. Which document provides a formal statement of one or more permissions?
10. In which language are policy documents written?
11. Can a IAM user belong to multiple group?
12. How many ways we can create customer managed policies in IAM?
13. What are the different access type is present during IAM user creation?
14. How many ways we can set permissions during IAM user creation?
15. Can we use Principle in “identity-based policy”?

**Assignment 4 :-** Launch your linux instance in IAM and update your machine.

The screenshot shows the AWS Management Console interface. At the top, there's a navigation bar with the AWS logo, 'Services' menu, a search bar, and a keyboard shortcut '[Alt+S]'. Below this is a breadcrumb trail: 'EC2 > Instances > i-0ebe4253d537526f0 > Connect to instance'. The main content area is titled 'Connect to instance' with an 'Info' link. It instructs the user to connect to instance i-0ebe4253d537526f0 (My DevOps) using any of the following options: 'EC2 Instance Connect' (selected), 'Session Manager', 'SSH client', and 'EC2 serial console'. Below these tabs, the instance details are listed: 'Instance ID' as 'i-0ebe4253d537526f0 (My DevOps)', 'Public IP address' as '52.91.105.252', and 'User name' as 'ubuntu' (in a text input field). A note at the bottom states: 'Note: In most cases, the guessed user name is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI user name.' At the bottom right, there are 'Cancel' and 'Connect' buttons.

```
ubuntu@ip-172-31-84-59:~$ apt-get update
Reading package lists... Done
E: Could not open lock file /var/lib/apt/lists/lock - open (13: Permission denied)
E: Unable to lock directory /var/lib/apt/lists/
W: Problem unlinking the file /var/cache/apt/pkgcache.bin - RemoveCaches (13: Permission denied)
W: Problem unlinking the file /var/cache/apt/srcpkgcache.bin - RemoveCaches (13: Permission denied)
ubuntu@ip-172-31-84-59:~$ sudo su
root@ip-172-31-84-59:/home/ubuntu# apt-get update
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [114 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease [99.8 kB]
Get:4 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 Packages [14.1 MB]
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe Translation-en [5652 kB]
Get:7 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [462 kB]
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 c-n-f Metadata [286 kB]
Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [217 kB]
Get:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse Translation-en [112 kB]
Get:11 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [102 kB]
Get:12 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [376 kB]
Get:13 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 c-n-f Metadata [8372 B]
Get:14 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [698 kB]
Get:15 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [57.6 kB]
Get:16 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [606 kB]
Get:17 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [159 kB]
Get:18 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [77.1 kB]
Get:19 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [2408 B]
Get:20 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 Packages [4192 B]
Get:21 http://security.ubuntu.com/ubuntu jammy-security/multiverse Translation-en [900 B]
Get:22 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 c-n-f Metadata [10.8 kB]
Get:23 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 c-n-f Metadata [228 B]
Get:24 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [417 kB]
Get:25 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [63.9 kB]
Get:26 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 c-n-f Metadata [580 B]
Get:27 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [747 kB]
Get:28 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe Translation-en [123 kB]
Get:29 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 c-n-f Metadata [4404 B]
Get:30 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 Packages [7220 B]
Get:31 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse Translation-en [2360 B]
Reading package lists... Done
root@ip-172-31-84-59:/home/ubuntu# apt-get dist-upgrade
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
The following packages were automatically installed and are no longer required:
  libflashrom1 libftd1-2
Use 'sudo apt autoremove' to remove them.
```