

## Assignment sheet for IAM

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

Answer : Created an IAM user with the name of “admin” and assigned him the administrator permissions

[IAM](#) > [User groups](#) > [admin](#)

admin

Delete

#### Summary

Edit

User group name  
admin

Creation time  
October 07, 2022, 12:34 (UTC+05:30)

ARN  
 arn:aws:iam::111165326287:group/admin

[Users](#) | [Permissions](#) | [Access Advisor](#)

#### Permissions policies (1) [Info](#)

You can attach up to 10 managed policies.





Simulate

Remove

Add permissions ▼

< 1 > 

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

### 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.

Created three new users test\_user1, test\_user2 and test\_user3 and assigned them in the Avengers group

IAM > User groups > Avengers

## Avengers

Delete

### Summary

Edit

User group name Avengers	Creation time December 27, 2022, 11:27 (UTC+05:30)	ARN <a href="#">arn:aws:iam::111165326287:group/Avengers</a>
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Users Permissions Access Advisor

### Users in this group (3)

An IAM user is an entity that you create in AWS to represent the person or application that uses it to interact with AWS.



Remove users

Add users

Search

< 1 > ⌕

<input type="checkbox"/>	User name <a href="#">↗</a>	Groups	Last activity	Creation time
<input type="checkbox"/>	<a href="#">test_user3</a>	1	None	1 minute ago
<input type="checkbox"/>	<a href="#">test_user2</a>	1	None	1 minute ago
<input type="checkbox"/>	<a href="#">test_user1</a>	1	None	8 minutes ago

## Permissions of the Avengers Group :

IAM > User groups > Avengers

## Avengers

Delete

### Summary

Edit

User group name Avengers	Creation time December 27, 2022, 11:27 (UTC+05:30)	ARN <a href="#">arn:aws:iam::111165326287:group/Avengers</a>
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Users Permissions Access Advisor

### Permissions policies (1) [Info](#)

You can attach up to 10 managed policies.



Simulate

Remove

Add permissions [▼](#)

Filter policies by property or policy name and press enter.

< 1 > ⌕

<input type="checkbox"/>	Policy name <a href="#">↗</a>	Type	Description
<input type="checkbox"/>	<a href="#">IAMFullAccess</a>	AWS managed	Provides full access to IAM via the AWS Management Console.

## 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

Answer : Created a policy and added the expiration conditions

## Summary

Policy ARN    `arn:aws:iam::111165326287:policy/EC2_InstancePolicy` 

Description

Permissions

Policy usage

Tags

Policy versions

Access Advisor

Policy summary

{ } JSON

Edit policy

```

1 {
2   "Version": "2012-10-17",
3   "Statement": [
4     {
5       "Sid": "Stmt1672122312961",
6       "Action": "ec2:*",
7       "Effect": "Allow",
8       "Resource": "arn:aws:ec2:ap-northeast-1:111165326287:instance/i-0103a6f22ed13ccd0",
9       "Condition": {
10        "DateGreaterThan": {
11          "aws:CurrentTime": "2023-01-01T00:00:00Z"
12        },
13        "DateLessThan": {
14          "aws:CurrentTime": "2023-04-30T23:59:59Z"
15        }
16      }
17    ]
18  }
19 }

```

**Assignment 4 :- Prepare 15 authentic MCQ questions related to IAM.**

- Which statement is true regarding IAM?
  - It allows you to deploy and manage applications in the AWS Cloud.
  - IAM allows you to manage users, groups, roles, and their corresponding level of access to the AWS Platform.
  - IAM allows you to manage users' passwords only and can be done via raising a ticket
  - IAM allows you to manage permissions for AWS resources only

Answer : B

- Which of these is a part of IAM (Choose two)
  - MFA.
  - Billing
  - Instance
  - Policy

Answer : a and d

- In which language IAM policies are being written
  - html
  - xml
  - json
  - java

Answer : c

- Can a user belong to multiple groups?

- a) true
- b) false

Answer : a

5. By default an IAM user created will have
- a) Partial permission
  - b) No permission
  - c) Full permission

Answer : b

6. Which of the following is not a part of Policy structure
- a) version
  - b) id
  - c) statement
  - d) Access

Answer : d

7. Which of the following is true about principal
- a) account/user/role to which this policy applied to
  - b) an identifier for the statement
  - c) list of actions this policy allows or denies
  - d) list of resources to which the actions applied to

Answer : a

8. An user cannot inherit the permissions assigned in the group
- a) true
  - b) false

Answer : b

9. What is an additional way to secure the AWS accounts of both the root account and new users alike?

- a) Implement Multi-Factor Authentication for all accounts.
- b) Store the access key id and secret access key of all users in a publicly accessible plain text document on S3 of which only you and members of your organization know the address to.
- c) Configure the AWS Console so that you can only log in to it from your internal network IP address range.
- d) Configure the AWS Console so that you can only log in to it from a specific IP Address range

Answer : a

10. What is the optional element in IAM policy document

- a) Version
- b) Action
- c) Effect
- d) Condition

Answer : d

11. A \_\_\_\_\_ is a document that provides a formal statement of one or more permissions.

- a) Group
- b) Policy
- c) Role
- d) User

Answer : b

12. Can we revoke a policy assigned to a user?

- a) true
- b) false

Answer : a

13. Which of these is Identity in IAM?

- a) roles
- b) groups
- c) users
- d) all of these

Answer : b

14. Which of the following can be used along multiple identities?

- a) roles
- b) policies
- c) users
- d) password

Answer : b

15. Which of these is IAM principal?

- a) roles
- b) application
- c) users
- d) all of these

Answer : d

## Assignment 5 :- Launch your linux instance in IAM and update your machine

Answer : Created an ubuntu instance and updated the machine

Instances (1/1) Info									
Find instance by attribute or tag (case-sensitive)									
<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv6
<input checked="" type="checkbox"/>	Uduntu_instance	i-0558626b63d726746	Terminated	t2.micro	-	No alarms	us-east-1b	-	-

```
aws
Services
Search [Alt+S]

ubuntu@ip-172-31-84-213:~$ sudo 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 [532 kB]
Get:8 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [114 kB]
Get:9 http://security.ubuntu.com/ubuntu jammy-security/main amd64 c-n-f Metadata [7388 B]
Get:10 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [460 kB]
Get:11 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [70.5 kB]
Get:12 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 c-n-f Metadata [532 B]
Get:13 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [622 kB]
Get:14 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 c-n-f Metadata [286 kB]
Get:15 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [82.9 kB]
```

```
Get:37 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 c-n-f Metadata [272 B]
Get:38 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/restricted amd64 c-n-f Metadata [116 B]
Get:39 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 Packages [6740 B]
Get:40 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe Translation-en [9460 B]
Get:41 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 c-n-f Metadata [348 B]
Get:42 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/multiverse amd64 c-n-f Metadata [116 B]
Fetched 25.1 MB in 4s (6084 kB/s)
Reading package lists... Done
ubuntu@ip-172-31-84-213:~$ sudo apt-get upgrade
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
The following packages will be upgraded:
  apport binutils binutils-common binutils-x86-64-linux-gnu ca-certificates cloud-init initramfs-tools initramfs-tools-bin initramfs-tools-core
  libpython3.10-minimal libpython3.10-stdlib libxml2 python3-apport python3-distupgrade python3-problem-report python3-tz python3.10 python3.10
26 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
Need to get 13.6 MB of archives.
After this operation, 138 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libpython3.10 amd64 3.10.6-1~22.04.2 [1955 kB]
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 python3.10 amd64 3.10.6-1~22.04.2 [497 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libpython3.10-stdlib amd64 3.10.6-1~22.04.2 [1832 kB]
Get:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 python3.10-minimal amd64 3.10.6-1~22.04.2 [2251 kB]
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libpython3.10-minimal amd64 3.10.6-1~22.04.2 [810 kB]
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 ca-certificates all 20211016ubuntu0.22.04.1 [144 kB]
Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libbpf0 amd64 1:0.5.0-1ubuntu22.04.1 [140 kB]
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libxml2 amd64 2.9.13+dfsg-1ubuntu0.2 [764 kB]
Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 tzdata all 2022g-0ubuntu0.22.04.1 [333 kB]
Get:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 ubuntu-release-upgrader-core all 1:22.04.15 [26.2 kB]
```