

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

Add user

12345

Review

Review your choices. After you create the user, you can view and download the autogenerated password and access key.

User details

User name

abi

AWS access type

AWS Management Console access - with a password

Console password type

Custom

Require password reset

No

Permissions boundary

Permissions boundary is not set

Permissions summary

The following policies will be attached to the user shown above.

Type	Name
Managed policy	AdministratorAccess

Tags

No tags were added.

Cancel

Previous

Create user

Identity and Access Management (IAM)

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Introducing the new Users list experience

We've redesigned the Users list experience to make it easier to use. Let us know what you think.

The user abi have been created.

IAM > Users

Users (1) info

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

Find users by username or access key

User name

Groups

Last activity

MFA

Password age

Active key age

☐

abi

None

Never

None

Now

-

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.

✓ Avengers user group created. View group ✕

IAM > User groups

User groups (1) Info
A user group is a collection of IAM users. Use groups to specify permissions for a collection of users.

Refresh Delete Create group

<input type="checkbox"/>	Group name	Users	Permissions	Creation time
<input type="checkbox"/>	Avengers			Loading Defined

Identity and Access Management (IAM) ✕

Dashboard

▼ Access management

- User groups
- Users**
- Roles
- Policies
- Identity providers
- Account settings

▼ Access reports

- Access analyzer

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✓ The user spiderman have been created.

IAM > Users

Users (1) Info
An IAM user is an identity with long-term credentials that is used to interact with AWS in an account.

Refresh Delete Add users

<input type="checkbox"/>	User name	Groups	Last activity	MFA	Password age	Active key age
<input type="checkbox"/>	spiderman	Avengers	Never	None	Now	-

Identity and Access Management (IAM) ✕

Dashboard

▼ Access management

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- Access analyzer

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✓ The user ironman have been created.

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.

Refresh Delete Add users

<input type="checkbox"/>	User name	Groups	Last activity	MFA	Password age	Active key age
<input type="checkbox"/>	ironman	Avengers	Never	None	Now	-
<input type="checkbox"/>	spiderman	Avengers	Never	None	1 minute ago	-

✓ The user hulk have been created.

IAM > Users

Users (3) Info
An IAM user is an identity with long-term credentials that is used to interact with AWS in an account.

Refresh Delete Add users

<input type="checkbox"/>	User name	Groups	Last activity	MFA	Password age	Active key age
<input type="checkbox"/>	hulk	Avengers	Never	None	Now	-
<input type="checkbox"/>	ironman	Avengers	Never	None	2 minutes ago	-
<input type="checkbox"/>	spiderman	Avengers	Never	None	3 minutes ago	-

Avengers

Delete

Summary

Edit

User group name

Avengers

Creation time

November 03, 2022, 12:22 (UTC+05:30)

ARN

arn:aws:iam::554648072519:group/Avengers

Users

Permissions

Access Advisor

Users in this group (3)

Remove users

Add users

Q Search

< 1 >

<input type="checkbox"/>	User name ↗	Groups	Last activity	Creation time
<input type="checkbox"/>	spiderman	1	None	4 minutes ago
<input type="checkbox"/>	hulk	1	None	1 minute ago
<input type="checkbox"/>	ironman	1	None	3 minutes ago

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

Visual editor

JSON

Import managed policy

```

1 {
2   "Version": "2012-10-17",
3   "Statement": [
4     {
5       "Effect": "Allow",
6       "Action": "ec2:*",
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 }

```

Security: 0

Errors: 0

Warnings: 0

Suggestions: 0

Character count: 222 of 6,144.

Cancel

Review policy

Policies (986) Info	
A policy is an object in AWS that defines permissions.	
<input type="text"/> <small>Filter policies by property or policy name and press enter.</small>	
Policy name	Type
<input type="radio"/> AbI_Policy_For_EC2	Customer managed
<input type="radio"/> AWSDirectConnectReadOnlyAccess	AWS managed
<input type="radio"/> AmazonGlacierReadOnlyAccess	AWS managed
<input type="radio"/> AWSMarketplaceFullAccess	AWS managed
<input type="radio"/> ClientVPNServiceRolePolicy	AWS managed
<input type="radio"/> AWSSSODirectoryAdministrator	AWS managed
<input type="radio"/> AWSIoT1ClickReadOnlyAccess	AWS managed
<input type="radio"/> AutoScalingConsoleReadOnlyAccess	AWS managed
<input type="radio"/> AmazonDMSRedshiftS3Role	AWS managed
<input type="radio"/> AWSQuickSightListIAM	AWS managed

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

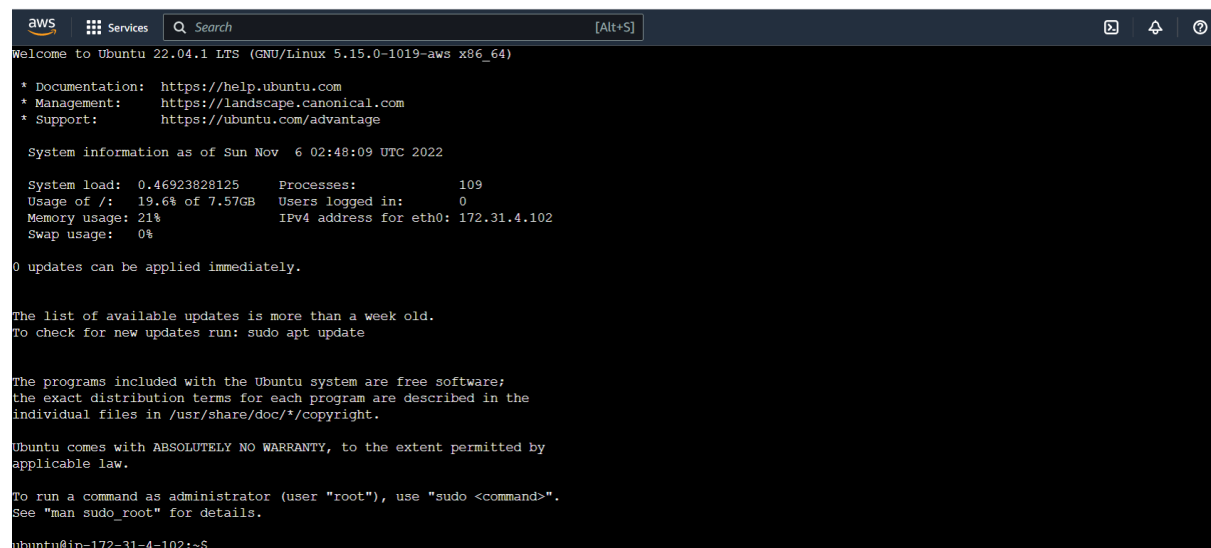
AWS Identity and Access Management MCQs

- Name the service that is used to provide access control to aws
 - EC2
 - IAM**
 - RBS
- What will be the charges for using IAM
 - IAM is offered at no additional charge**
 - Its charged based on usage
 - Its charged based on the number of users created
- When you provide permission using IAM, you should always
 - Provide the maximum permission so that its flexible for the user to work in aws
 - Do not provide any permission
 - Provide only the least permission required to perform the task**
 - Provide administrator permission to users
- What is used to generate fine grained IAM policy based on user's use of aws?
 - IAM Access Analyzer**
 - IAM Access Generator
 - AWS Access Analyzer
 - AWS Access Generator

- 5) Which service is used to assign/manage access to multiple AWS accounts, SAML enabled cloud applications(Salesforce, Microsoft 365, and Box), and custom-built in-house applications from a central place.
- a) **IAM Identity Center**
 - b) CloudTrail
 - c) CloudWatch
 - d) AWS Access Generator
- 6) What should you use if you want to grant access to your AWS accounts by relying on short-term credentials
- a) IAM Policies
 - b) IAM Users
 - c) Groups
 - d) **IAM roles**
- 7) What are the identities with long-term credentials
- a) IAM roles
 - b) IAM Policies
 - c) **IAM Users**
 - d) Groups
- 8) What are the various Policy types available
- a) Identity based, Roles based, Permission boundary, Organization SCP(Service Control Policy), Access Control List(ACL), Session Policy
 - b) **Identity based, Resource based, Permission boundary, Organization SCP(Service Control Policy), Access Control List(ACL), Session Policy**
 - c) Users, Roles, Groups, Policies
- 9) Which policy is created and administered by AWS and cover common use cases
- a) Customer managed policies
 - b) AWS created policies
 - c) **AWS managed policies**
- 10) If you create your own standalone policy in aws, it is a type of
- a) AWS managed policies
 - b) **Customer managed policies**
 - c) AWS created policies
 - d) Customer created policy
- 11) Which policy is embedded in an IAM identity(user, group, role) and inherent to the identity
- a) **Inline policy**
 - b) Inherent policy
 - c) Resource based policy

- 12) Which policy will you use if you need to provide administrative permissions so as to ensure they are not attached to other roles
- a) **Inline policy**
 - b) Inherent policy
 - c) Resource based policy
- 13) If you can define permission based on tags, what is the type of access control ?
- a) **Attribute-based access control (ABAC)**
 - b) Tag-based access control (TBAC)
 - c) Role-based access control (RBAC)
- 14) Which Policy allow or deny access to AWS services of Organizations member accounts or groups of accounts within an organizational unit
- a) Standard control policies(SCP)
 - b) Organizational control policies(OCP)
 - c) **Service control policies(SCP)**
- 15) Which tool is used to test and troubleshoot identity-based and resource-based policies, IAM permissions boundaries, and SCPs ?
- a) **IAM policy simulator**
 - b) IAM policy troubleshooter
 - c) IAM policy tester

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



```
aws Services Search [Alt+S]
Welcome to Ubuntu 22.04.1 LTS (GNU/Linux 5.15.0-1019-aws x86_64)

* Documentation:  https://help.ubuntu.com
* Management:    https://landscape.canonical.com
* Support:       https://ubuntu.com/advantage

System information as of Sun Nov  6 02:48:09 UTC 2022

System load:  0.46923828125   Processes:            109
Usage of /:   19.6% of 7.57GB   Users logged in:     0
Memory usage: 21%            IPv4 address for eth0: 172.31.4.102
Swap usage:   0%

0 updates can be applied immediately.

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-172-31-4-102:~$
```