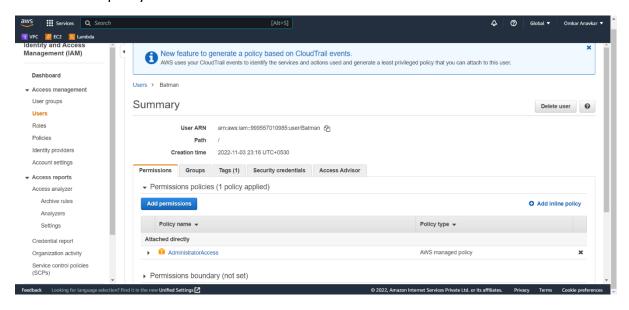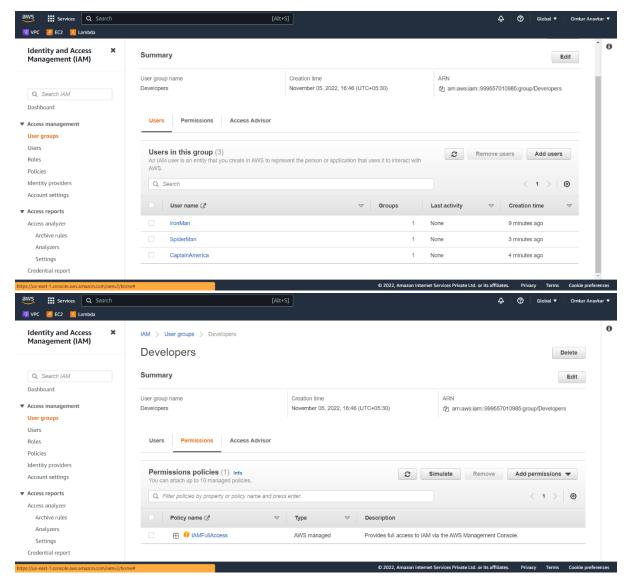# Assignment sheet for IAM

Assignment 1 :- Create an IAM user with username of your own wish and grant administrator 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.
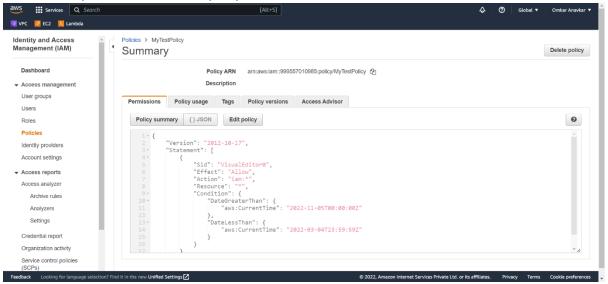
Assignment 3 :- Define a condition in policy for expiration like
"DateGreaterThan": {"aws:CurrentTime": "2020-04-01T00:00:00Z"},
"DateLessThan": {"aws:CurrentTime": "2020-06-30T23:59:59Z"}
Define the span of 4 months as per your wish

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

Q1. How many maximum access keys can be assigned to an IAM user?
- a. 1
- **b. 2**
- c. 3
- d. 4

Q2. IAM groups are :
- a. Same as IAM user.
- **b. Can be used to specify permissions for a collection of users.**
- c. It's truly an identity.
- d. All of above.

Q3. IAM Role:
- a. Have credentials (password or access keys) associated with it.
- **b. Does not have any credentials (password or access keys) associated with it.**
- c. May or may not have credentials associated with it.
- d. None of the above.

Q4. Identify the wrong statement.
- a. Identity and access management is a test. Framework for business processes that facilitates the management of electronic or digital identities.
- b. With IAM Technologies, IT managers can control user access to critical information within their organizations.
- c. Identity and access management products offer role based access control.
- **d. In IAM, roles are defined according to the ability of an individual user to perform a specific task such as view, create or modify a file.**

Q5. Identify the wrong statement.
   a. IAM can provide shared access to the AWS account.
   b. IAM is paid service in AWS.
   c. IAM can provide granular permissions.
   d. IAM supports multifactor authentication.

Q6. IAM temporary credentials:
   a. It expires automatically after a specific time.
   b. Have a same set of permissions that your standard IAM user have.
   c. We can have control over the duration that the credentials are valid.
   d. a & c both.

Q7. Which of these is identity in IAM?
   a. Users.
   b. Groups.
   c. Roles.
   d. All of the above.

Q8. An IAM user cannot be a member of more than __ groups?
   a. 10
   b. 20
   c. 30
   d. 40

Q9. An IAM user is:
   a. Is an entity that you create in AWS.
   b. Is to give people the ability to sign into the AWS management console for interactive tasks and to make programmatic requests to AWS services using the API or CLI.
   c. Both a and b.
   d. None of the above.

Q10. AWS supports __ types of policies?
   a. 4
   b. 5
   c. 6
   d. 7
Note: identity-based policies, resource-based policies, service control policies (SCPs), and permissions boundary policies

Q11. Choose whether below statements are true or false for IAM:
1. When you create an IAM user, you grant it permissions by making it a member of a group that has appropriate permission policies attached (recommended), or by directly attaching policies to the user
2. You can also clone the permissions of an existing IAM user, which automatically makes the new user a member of the same groups and attaches all the same policies.
   a. True, True
   b. True, False
   c. False, True
   d. False, False

Q12. How many maximum users can be created in an AWS account?
    a. 2000
    b. 5000
    c. 8000
    d. 10000

Q13. How many groups can be created in an AWS account.
    a. 50
    b. 100
    c. 300
    d. 500

Q14. How many roles can be created in an AWS account.
    a. 100
    b. 500
    c. 1000
    d. 5000

Q15. Which of this is not an IAM policy type?
    a. Smart Policies
    b. Access Control Lists
    c. Session Policies
    d. Organizations SCPs

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


```
Get:18 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [217 kB]
Get:19 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse Translation-en [112 kB]
Get:20 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 c-n-f Metadata [8372 B]
Get:21 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [695 kB]
Get:22 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [159 kB]
Get:23 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 c-n-f Metadata [10.8 kB]
Get:24 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [410 kB]
Get:25 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [63.1 kB]
Get:26 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 c-n-f Metadata [544 B]
Get:27 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [743 kB]
Get:28 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe Translation-en [122 kB]
Get:29 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 c-n-f Metadata [4404 B]
Get:30 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 Packages [13.7 kB]
Get:31 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse Translation-en [4228 B]
Get:32 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 c-n-f Metadata [420 B]
Get:33 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 Packages [3008 B]
Get:34 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main Translation-en [1432 B]
Get:35 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 c-n-f Metadata [272 B]
Get:36 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/restricted amd64 c-n-f Metadata [116 B]
Get:37 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 Packages [6748 B]
Get:38 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe Translation-en [9360 B]
Get:39 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 c-n-f Metadata [352 B]
Get:40 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/multiverse amd64 c-n-f Metadata [116 B]
Fetched 24.6 MB in 6s (4119 kB/s)
Reading package lists... Done
ubuntu@ip-172-31-40-5:~$
```

i-08020ef0f670ea10d (Bat_Server)

PublicIPs: 15.206.173.93   PrivateIPs: 172.31.40.5


```
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for install-info (6.8-4build1) ...
Processing triggers for initramfs-tools (0.140ubuntu13) ...
update-initramfs: Generating /boot/initrd.img-5.15.0-1019-aws
Scanning processes...
Scanning candidates...
Scanning linux images...

Running kernel seems to be up-to-date.

Restarting services...
 systemctl restart cron.service multipathd.service packagekit.service polkit.service ssh.service systemd-udevd.service udisks2.service
Service restarts being deferred:
 systemctl restart ModemManager.service
 /etc/needrestart/restart.d/dbus.service
 systemctl restart networkd-dispatcher.service
 systemctl restart systemd-logind.service
 systemctl restart unattended-upgrades.service
 systemctl restart user@1000.service

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-40-5:~$
```

i-08020ef0f670ea10d (Bat_Server)

PublicIPs: 15.206.173.93   PrivateIPs: 172.31.40.5