**AWS & LINUX**

1. select ec2 in awss
2. select instancesw
3. create instances in aws
4. select aws marketplace and search centos in search nar
5. select centos os 7 with free trial
6. choose ami or myami
7. choose instance type and enter next
8. select configuration instances neede /or default
9. add storage amd select delete on termination
10. select tags if we neede
11. configure security groups: select security group create new/ existing group
12. select keypair add name and download keypair

13. launch instances ( copy keyfile to another folder and open gitbash in keyfile folder)

1. to connect instance from gitbash open instance take ids from SSH GROUP
2. switch to root user : sudo su –
3. to know server name : hostname
4. to know ip of server : hostname –I or ifconfig

**LINUX COMMANDS**

1. connect to instance to ssh group detais
2. enter the root usre through command : sudo su –
3. enter main directory with : cd /opt
4. create directory and files if you need add directort and file command
5. to details of user : ll
6. to add username : useradd require name
7. to add passwd for user :passwd filename and enter and renter password
8. to check details of user : cat /etc/passwd
9. to see directory :cd /home
10. to see only username list : ll (it should apply only when home)
11. to add comment for user : usermod –c
12. to changr user : su - username
13. to check username : whoami
14. to exit from local user: exit
15. to delete user: userdel –r username
16. to check identity odf user : id
17. to install applications: yum install (application name) –y
18. to know installed applic version : appname --version
19. to see where it installed : whereis application name
20. .to see which app is running : which application name
21. to copy file from one directory to another : cp –rp filename/directory/filename
22. to move file from one directory to another : mv filename/directory/filename
23. to change filename : mv previousname newname of file
24. to know date :date
25. to know calendar : cal
26. to know calendar year : month year (ex- cal 07 1994)
27. to see words lines count in file : wc file
28. to see only lines : wc -l file
29. to see only words: wc –w file
30. to see only count :wc –wc file
31. to check performance of site : top
32. to stop one application performance : kill -9 pid <process id>

**ZIP AND UNZIP**

1. To download zip file : wget <url link>
2. To extract zip file :unzip <zip file>
3. To create zip : zip-r optional name.zp filename
4. To extract tor zip : tar –xvf <tarzip file>
5. To create tor zip : tar –cvf optional name.tar.gz filename
6. To change permissions of file : chmod 723 filename ( read-4 write-2 exec-1)
7. To edit file through vim command
8. 8.
9. Delete line : dd
10. Delete no of lines :ndd
11. Copy a line :yy
12. Copy no of lines : nyy
13. Paste :p
14. Undo :u
15. Delete word :dw
16. Delete no of words : ndw
17. To go top of file : H/gg
18. To go ground : G
19. To add numbers before lines : setnu
20. To del numbers before lines : set nonu
21. To search specific word : /specific word (press n to see next words)

**Class 5 commands**

1. To change hostname /server name :hostnamectl set-hostname <require name>
2. To see difeerence of files: diff file1 file2
3. To dee line by line difference : sdiff file1 file2 <changes indicated by marks>
4. To see size of file/ directory : du –sh filename
5. to see line by line size of files du –h directory name
6. to see size of drives : df –h
7. to search any word : grep –ir ‘require word’
8. to search any word in file: cat filename | grep-I ‘require word’
9. to get url status : ping <url>
10. to check port is using or not ;netstat –an (listen means it is in use,connect means not in use)
11. to check status of service: service httpd status
12. to start service of html: service httpd start
13. to stop service of html :service httpd stop
14. to search a file or dierctory : find / -name filename
15. to search only file: find / -name filename –type f
16. tosearch only directory: find / -name dirname –type d
17. to see running processes : ps –ef
18. to stop any processer: kill -9 pid <processname id>
19. to see specific word in line:cut –d ‘’-f1,1 filename
20. to see only server: cut –d ‘;” f1,3,7 /etc/passwd
21. to stop server from command :init 0( 0-shotdowm 1-single user mode 2-multiuser-no option 3-multiuser+allall support 4-reserved 5-gui mode 6-rebbot this all are run level commands)

**ELASTIC BLOCK STORAGE**

1. create instance in our selective zone (switch zone)
2. create instances by selecting subnets in configure details (previously we are creating by defaut subnets)
3. after complete of instances create volume im ec2 elastic block storage by selecting volumes
4. select create volume abd give storage specifications and subnet specications follow by instance
5. attach addl volume to required instance
6. to see volume data by command : lsblk
7. add extra volune to required path/dir : mkfs.ext4 /dev/xvdf
8. create directory path : mkdif /filename
9. mount extra data: mount –t ext4 /dev/xvdf /path or dir name
10. to copy data data from instance1 to instance2 by extra volume only
11. select extra volume and create snapshot
12. to move snapchat from one region to another region just copy snapchat and select required region
13. go to snapshot section and create volume for snapshot
14. attach volume created by snapshot to another instance (all require data need from server should be in extra voume)

**AMAZON MACHINE IMAGE(AMI)**

1. Iinstall httpd
2. need to start server along with reboot of instance : systemctl enable httpd
3. to launch our website our data on network cd /var
4. enter cd www
5. enter cd html
6. create file index.html
7. add our data to display on net in index.html

1. to create ami select instance
2. enter actions and select image and temptlates
3. select create image of AMI
4. and launch instance using created AMI in my AMI’s
5. create template from instance which created by usin AMI created by us
6. launch instance from created templates

**virtual private cloud (vpc)**

1. Search and select vpc in searchbar
2. Select your vpc’s
3. Select create vpc
4. Give vpc name
5. Select ipv4
6. Enter cidr 10.20.0.0/16 (in that id 16 means first two are constant)
7. Tenancy default
8. Create vpc
9. Select subnets
10. Create subnets and select vpc
11. Mention subnet name
12. Select availability zoneas per instance
13. Create ipvd cidr block 10.20.0.0/24
14. If u want more subnets select add subnets
15. Vvv
16. Vvv
17. Select internetgate way
18. Select Create internetgateway
19. Mention name and select created internetgateway
20. Select created internetgateway and attach to your vpc
21. Vvv
22. Vvv
23. select route tables
24. select create route table
25. mention name
26. select vpc
27. tags optional
28. create route table
29. select your created route tabale
30. enter into routes select edit routes
31. select internetgateway and add your created internetgateway
32. enter into subnet association and select edit subnet
33. select subnets which you want to allow and save changs
34. vvv
35. vvv
36. create instances by your created vpc and select subnets that which you gave permission in route table and select enable public ip
37. connect instance in gitbash here
38. vvv
39. vvv
40. to connect private instance or subnet which is not added in route table subnets
41. to acess private server need to install winscp
42. open winscp and select newsite
43. enter public ip of route table instance
44. enter username ec2-user
45. for password enter advance , authentication select pemp key file of instance and login
46. move that pemp file to root/temp/pemp file
47. enter ssh id with private ip of not connectd instance or need to connect instance
48. if not connected enter chmod 400 pempfile of instance

**ELASTIC LOAD BALANCER**

1. Select target group and create target group
2. In basic configuration select requirements of our work
3. Give name for group
4. Select vpc if you have any
5. ALLOW Http process if required
6. Check health checks and edit on your requirements
7. Give tags optional
8. Select instances and select including as pending below
9. Select Create target group
10. Selectloadbalancer in awsload balancing
11. Select Create load balancer
12. Select application load balancer/
13. Give name details
14. Select vpc if any available and require
15. Select subnets as per your insatances
16. Select security groups as per our requirements
17. Select required target group
18. Select create load balancer
19. To use or check load balance copy dns from load balancer info
20. Search that dns in browser.
21. To stop any server data just remove subnet from load balancer
22. Use dns n loadbalancer to check

**Auto scaling**

1. Select autoscale in ec2
2. Select launch configuration
3. Select ami type
4. Select instance type
5. Select security group
6. Select keypair
7. Createlaunch configuration
8. Vvv
9. Vvv
10. Select autoscaling roup
11. Select create autoscaling group
12. Select launch configuration directly or switch to launch configuration and click next
13. Select vpc if you have or default
14. Select subnets wish to launch and click next
15. Select loadbalance if you need with existing or new
16. Select heath check grace period if requires and next
17. Select min,max and desired capacity as per you require
18. Select target tracking policy by metric type as requires in options
19. Select target value (need to start extra server )
20. Select notification , create topic by add data and mail id whom need to send and click next
21. Add tags optional and click next
22. And select create autoscaling group
23. To create manual load :yes > /dev/null &
24. To see server performance /: top
25. To stop performance of server : kill -9 pid <pid no>

**Elastic ip address**

1. Elastic ip is used to maintain one permanent public ip for your instances
2. Select elastic ip in network and security at ec2
3. Create instance
4. Allocate elatsic ip address
5. Go to actions and select associate elastic ip address
6. Select instance or network interface
7. Select associate . check elastic ip and public ip will be same or not
8. Vvv
9. vvvnet
10. network interface is used to acess your application from various ips
11. select network interface and click create network interface
12. create name for your network interface
13. select subnet according to your instance subnet
14. select security group
15. tags optional and click on create new network interface
16. select created network interface and goto actions and attach your instance
17. check your networking in instances wether two network interfaces is available or not
18. connect instance in gitbash
19. check ip address by : ifconfig
20. here we can see all private ips attached to this instances

**IAM (Identical Acess Management)**

Thi sapplication is used to give your AWS account for access or permission to others

1. Search iam in search bar
2. Select IAM and select users and click on add users
3. Give user name
4. Give password type ( prefer aws management console access)
5. Enter into permission and set permission according to your requirements ( 1. Adduser to group 2.copy permission from existing users 3.attach existing policies directly \* if you selected third option you need to give permission to user of your requirements)
6. Tags optional and click on review
7. See your setup permission and create user
8. Download password file , send mail to user if requires
9. Vvv
10. vvv
11. select user group and enter into create group
12. mention group name
13. select users need to add group (optional for group creating)
14. select policies/permissions to group for access
15. and select create group
16. vvv
17. vvv
18. policies means permission in this we have acces to create permission in our own requiremqnt basis
19. select policies and enter create policies
20. after entering create policie there are two options is visual editor and Jason code ( if uyou knoe jason code use Jason code otherwise use visual editor)
21. select service as per your requirements
22. choose sections as per your requirements
23. choose resources as per your requirements (edit option is available for if you need) and click next tags
24. tags is optional and click next review
25. mention name and click on create policie
26. use this policy in csers,user group and roles if you need
27. vvv
28. vvv
29. role is single permission or coolection of permissions/policies
30. select role and enter into create role
31. select required entity type
32. select ec2 in common use ane click next
33. select requirement policies and created policies by you if we need and click next
34. enter role name and tags optional and
35. select the create role

**RDS (relation data base)**

1. Search rds in search bar select database in rds
2. Select create database
3. Choose database creation mode standard or easy
4. Select engine options by our requirements
5. Select version
6. Choose template type any one of dev/production/freetier
7. Choose name in database identifier
8. Create master name and password in credentials
9. Db instance class as per your requirements
10. Select storage type as per your requirements
11. Allocate storage as per your requirements
12. Enable or diable autoscalins as per your requirements
13. Select vpc as default or any own vpc
14. Choose public access no
15. Choose security group by default or own security group
16. Availability zones as per your requirements
17. Choose database password authentication in DB authentication
18. Select additional configuration
19. Enable backup and choose retention period
20. Enable monitoring for cpu ram performance
21. Select iam if you have any
22. Enable Maintainace for upgrades of software automatically if there is any new version available
23. Select maintainance window period
24. Enable or disable for deletion protection as per your requirements and click on create database.
25. View credential details to see user id and password

**3( simple storage service)**

1. Search s3 in search bar and enter s3 and select create bucket
2. Mention name for bucket
3. Select region as requires
4. Select access control of object ownership enable or disable as per your requirement( disable is recommended)
5. Select block all public access
6. Disable bucket version
7. Tags optional and select default encryption disable
8. Click on create bucket
9. Select the created bucket and upload your files and data
10. Select uploaded file copy object url in properties
11. Search that url in browser to access image
12. If the image is doesnot have access
13. Select permissions in bucket and change object and image properties for public access
14. After giving permission in bucket and also chane permission in selected image permission. Then you have acces to show that image in browser

**Elastic file storage(EFS)**

Elastic storage means a storage which is connected by all servers ans also called central storage it will be access from all servers

1. Search efs in search bar ansd select efs
2. Click on create file system
3. Mention name
4. Select vpc
5. Select zone or region
6. Select customize is optional as per your requirements
7. Click on creted file system
8. Select created file and click on atach
9. Select and copy sudo commands
10. Connect instances and do for all required instances
11. Create a efs directory
12. Use this command: Yum install amazon-efs-utils
13. Enter the above copied command
14. Enter efs directory and create new file and createdata
15. Again enter into efs directory in other instances and edit data in files check the changes updated or not in other instances

**Simple notification service (sns) & cloud watch**

1. Search and select sns
2. Select topic and click next step
3. Select standard
4. Mention name and vlick on create topic
5. Select created topic and click on create subscription
6. Select requirement protocol and mention require mail id
7. Click on create subscription
8. Open mail and confirm subscription
9. Vvv
10. Vvv
11. Search and select cloud watch
12. Select all alarams and click on create alaram
13. Select metric and click on next
14. Select metric option of your requirements
15. After selection mention instance id of notification
16. Give standards as per your require ments
17. Select sns topic and click on next
18. Mention name and click on next
19. And click on create alaram