CCL

339713154230 AWS

<https://drive.google.com/drive/u/0/folders/1me_nJJh0fvdDOXX3ew2jzGQpoP7f_iFt>

FOR VMDK: <https://bit.ly/ubuntu00>

<https://bit.ly/Ubuntu00>

FOR DOWNLOAD ON UBUNTU:

https://www.virtualbox.org/wiki/Linux\_Downloads

cd Downloads

ls

// sudo dpkg -i vir type aur tab type karo

OR

sudo dpkg -i virtualbox-7.0.deb ka naam

sudo apt -f install

SANDBOX:

<https://developer.salesforce.com/signup>

VM To VM

VM1(Establish Nat network in both VMs & Don’t Clone VMs)

Commands:

vagrant

vagrant

ifconfig

sudo apt install net-tools

ping

ls

touch

nano

scp filename vagrant@(ipaddressvm2):/home/vagrant

VM2

ifconfig

ls /home/vagrant/

Salesforce:

Username: name@company.sandbox

<https://bit.ly/ubuntu00>

https://drive.google.com/file/d/1yuRw45dxlacAaZsOksWGPzqLfya87GZ3/view?usp=drive\_link

WAD

PS C:\Users\aadit> mongosh

PS C:\Users\aadit> npm install -g mongosh

PS C:\Users\aadit> mongosh

test> show databases

test> use marks

switched to db marks

marks> show collections

collection\_name

marks> db.collection\_name.find({'Name':'Aaaa'})

[

{

\_id: ObjectId('6630adb205e687a5ae82f4d2'),

Name: 'Aaaa',

Roll\_No: '1211',

WAD\_Marks: 64,

CC\_Marks: 75,

DSBDA\_Marks: 162,

CNS\_Marks: 75,

AI\_MArks: 62,

\_\_v: 0

}

]

marks> db.collection\_name.updateOne( { Name: "Aaaa", Roll\_No: "1211" }, /\* Filter to identify the document\*/ { $set: { WAD\_Marks: 70, CC\_Marks: 80, DSBDA\_Marks: 170, CNS\_Marks: 80, AI\_Marks: 65 } } /\* Update fields\*/ )

{

acknowledged: true,

insertedId: null,

matchedCount: 1,

modifiedCount: 1,

upsertedCount: 0

}

marks> db.collection\_name.find({'Name':'Aaaa'})

[

{

\_id: ObjectId('6630adb205e687a5ae82f4d2'),

Name: 'Aaaa',

Roll\_No: '1211',

WAD\_Marks: 70,

CC\_Marks: 80,

DSBDA\_Marks: 170,

CNS\_Marks: 80,

AI\_MArks: 62,

\_\_v: 0,

AI\_Marks: 65

}

]

marks> db.collection\_name.deleteOne({ Name: "Aaaa", Roll\_No: "1211" })

{ acknowledged: true, deletedCount: 1 }

marks> db.collection\_name.insertOne({

Name: "John",

Roll\_No: "1234",

WAD\_Marks: 80,

CC\_Marks: 85,

DSBDA\_Marks: 170,

CNS\_Marks: 90,

AI\_Marks: 75,

\_\_v: 0

})

db.collection\_name.insertMany([

{ Name: "Alice", Roll\_No: "1235", WAD\_Marks: 75, CC\_Marks: 80, DSBDA\_Marks: 160, CNS\_Marks: 85, AI\_Marks: 70, \_\_v: 0 },

{ Name: "Bob", Roll\_No: "1236", WAD\_Marks: 85, CC\_Marks: 90, DSBDA\_Marks: 180, CNS\_Marks: 95, AI\_Marks: 80, \_\_v: 0 }

])

Sudo bash

Gedit /var/log/kern.log

Salesforce:

Student : name , id , email , phone number

Course: c\_id , c\_name,

Teacher: T\_id , name , email,phone

mongodb+srv://aadityab1444:Ad123456@cluster0.enwjod3.mongodb.net/doc-app

mongodb+srv://nahushthuse:Nahush1234@cluster0.ez8z0hu.mongodb.net/?retryWrites=true&w=majority&appName=Cluster0

### Add a new song

POST http://localhost:2324/add

Content-Type: application/json

{

"Songname": "New Song",

"Film": "New Film",

"Music\_director": "New Director",

"singer": "New Singer",

"Actor": "New Actor",

"Actress": "New Actress"

}

### Display total count and all documents

GET http://localhost:2324/displayCountAndDocuments

### Update actor and actress of a song

PUT http://localhost:2324/updateActorAndActress

Content-Type: application/json

{

"songID": "songID",

"Actor": "New Actor Name",

"Actress": "New Actress Name"

}

1) display: flex;: Flexbox is a layout model in CSS that allows items within a container to be dynamically arranged depending on available space, enabling more efficient and flexible layouts.

2) flex-wrap: wrap;: This property specifies whether the flex items should wrap or not if they exceed the container's width. In this case, it's set to "wrap", meaning the items will wrap onto multiple lines if they can't fit in a single line.

set object-fit: cover;, the content (image or video) will be resized to completely cover the container's dimensions while maintaining its aspect ratio.

flex: 0 0 auto; means:

The flex item will not grow (flex-grow: 0) if there is extra space available.

The flex item will not shrink (flex-shrink: 0) if there is not enough space available.

The initial size of the flex item will be determined by its content (flex-basis: auto).

jQuery is a fast, small, and feature-rich JavaScript library. It simplifies various tasks such as HTML document traversal and manipulation, event handling, animation, and AJAX interactions for rapid web development.

AJAX, which stands for Asynchronous JavaScript and XML, is a set of web development techniques used to create asynchronous web applications. It allows web pages to make asynchronous HTTP requests to the server without reloading the entire page. This enables dynamic updates to the content of a web page, improving user experience by providing faster and more interactive interfaces.

When set to collapse, it means that adjacent table cell borders will merge into a single border, giving a cleaner and more consistent look to the table.

SCP (Secure Copy Protocol) is a command-line tool used to securely transfer files between a local and remote host.

SCP works in a NAT environment:

1. **Outbound Connection from Local System**: If your local system is behind a NAT, when you initiate an SCP transfer to a remote system, the NAT device will modify the packet headers, replacing the local IP address and possibly port with its own external IP address and a dynamically assigned port. This allows the remote system to respond back to the NAT device.
2. **Inbound Connection to Remote System**: The SCP protocol typically uses port 22 for SSH communication. When the remote system receives the SCP transfer request, it sends its response back to the NAT device's external IP address and port. The NAT device, based on its configuration and NAT table entries, forwards this response to the local system that initiated the transfer.
3. **NAT Configuration**: For SCP to work properly in a NAT environment, the NAT device must be configured to forward incoming traffic on port 22 (or whichever port SCP is using for SSH) to the correct internal IP address of your local system. This is typically done through port forwarding or NAT traversal techniques.
4. **Firewall Considerations**: Additionally, firewalls on both the local and remote systems may need to be configured to allow SCP traffic. On the local system, ensure outbound traffic on port 22 is allowed. On the remote system, ensure inbound traffic on port 22 is allowed.

NAT, or Network Address Translation, is a process used in computer networking to modify network address information in packet headers while in transit across a traffic routing device, typically a router or firewall.

Here's how it works:

1. **Private and Public IP Addresses**: In most networks, devices are assigned private IP addresses (like those from the ranges defined in RFC 1918 - 10.0.0.0/8, 172.16.0.0/12, and 192.168.0.0/16). These private addresses are not routable on the public internet. Conversely, public IP addresses are globally unique and can be used to communicate over the internet.
2. **Translation**: When a device on a private network wants to communicate with a device on the public internet, NAT translates the private IP address of the sending device to a public IP address before sending the packet out onto the internet. This allows the device to communicate with servers on the internet using a public IP address.
3. **Port Mapping**: In addition to translating IP addresses, NAT also often maps ports. Multiple devices on a private network may be translated to the same public IP address, but with different port numbers. When responses are received from the internet, NAT uses this port information to correctly route incoming traffic back to the appropriate device on the private network.
4. **Types of NAT**: There are different types of NAT, including:
   * Static NAT: Maps a private IP address to a specific public IP address, typically one-to-one mapping.
   * Dynamic NAT: Maps multiple private IP addresses to a pool of public IP addresses on a first-come, first-served basis.
   * PAT (Port Address Translation): Maps multiple private IP addresses to a single public IP address using different port numbers.
5. **Benefits**: NAT helps conserve public IP addresses by allowing multiple devices on a private network to share a single public IP address. It also provides a layer of security by hiding the internal network structure from external entities.

**ping**: This command is used to test the reachability of a remote host by sending ICMP (Internet Control Message Protocol) echo request packets to the target host and waiting for ICMP echo reply packets.

* IaaS provides virtualized computing resources over the internet. This typically includes virtual machines, storage, and networking resources that are offered as a service by a cloud provider.
* Users of IaaS have control over the operating system, middleware, runtime, and applications, but they are responsible for managing these components themselves.
* SaaS delivers software applications over the internet on a subscription basis. Users access these applications through a web browser or an API without needing to install or manage any software locally.
* SaaS providers host and maintain the software, handle updates and patches, and manage infrastructure, including servers, databases, and networking.

"Platform as a Service" (PaaS) is a cloud computing service model that provides a platform allowing customers to develop, run, and manage applications without the complexity of building and maintaining the underlying infrastructure typically associated with software development.

In simpler terms, PaaS offers a ready-to-use platform that includes hardware, operating systems, middleware, development tools, database management systems, and other necessary components for application development and deployment. With PaaS, developers can focus on writing code and building applications without worrying about managing or provisioning servers, storage, and networking infrastructure.