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Passport Application

1. Aim: Create a webapp for passport application system.

Procedure:

- ⇒ open the Zoho
- ⇒ Signup which is already present on site
- ⇒ next you should give password and mail
- ⇒ now we get complete login
- ⇒ ~~you~~ have to choose the creator option
- ⇒ It will ask the name given for app
- ⇒ Based on application choose name
- ⇒ fill the details which are given on the template
- ⇒ fill the details which are given on the template for application.
- ⇒ after filling click "done"
- ⇒ give input & check the input whether selected or not.

Result: The Webapp is created and then verified by checking with the given inputs

Output:

Name:

Email:

Phno:

Address:

Date of birth:

Address:

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Cab Booking

Aim: Create a web app for cab booking system

Procedure:

- Open the zoho.com
- Log In to zoho
- By using complete login details
- By click the creator we can give name
- Fill the details for the information needed for template
- Fill the information related to your cab booking system
- Click the "done"
- Check whether the details are done or not
- after filling done with options.

Result: The webapp for cab booking System is created & the verified/successfully

Output

Name:	<input type="text"/>	<input type="text"/>
Phone:	<input type="text"/>	
Address:	<input type="text"/>	
Start date:	<input type="text"/>	
Time:	<input type="text"/>	
Book now:	<input type="checkbox"/>	

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3. Aim: create a web app for employee payroll system.

Procedure:

- open the Zoho app
- It asks for Authentication
- If shows different applications like creator, app, etc
- click "creator"
- Then it asks choose Template
- choose template based on your need.
- choose template of your application.
- otherwise choose by our own option.
- They are: • Name
 - Id, email, phno etc
- fix the details & click done option
- Next give the Input According to your app & choose output with input

Result: The webapp for employee payroll system is created & then verified successfully.

Output:

Name:	<input type="text"/>	<input type="text"/>	Basicpay	<input type="text"/>
email:	<input type="text"/>		DA	<input type="text"/>
Address:	<input type="text"/>		CCA	<input type="text"/>
Basic pay:	<input type="text"/>		TAX	<input type="text"/>
Salary:	<input type="text"/>			<input type="text"/>

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Student Information

Aim: Create a web application for student information system.

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5Procedure:

- Open the zoho.com
- Log in to zoho & give IPHe email
- Now it provides options to choose
- have creator as the option which we can access our data.
- Next It uses API based on your application details that are given on template
- after filling details click done
- given inputs according to you are app & check with input whether it is selected or not.

Result: The web app for student information system is created & verified.

Output:Name: Registration Number: Year of admission:

Sub-form

Subject name	Percent
+ Add new	

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Hotel reservation

5. Aim: Create a App for Hotel reservation system.

Procedure:

- open zoho app
- It asks permission
- Enter mail & password. It shows creator click on it.
- go to new collection where we have to create
- choose the template which is suitable for your APP
- In template shows options which we have to fill

Attributes: → Hotel name

→ cust name, phno, email

→ date, leaving date

- few details & click "done"
- next give inputs according to your application & check out the working.

Result: The webapp for Hotel reservation system is verified - output

Name:

Mobileno:

Checkin:

No. of rooms

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Vmware Application

6. Aim: Create the Vmware application with name.

Procedure:

Installation?

- At first we should create Vm ware workstation.
 - Then open it Show options.
 - Click on "Home"
 - directly show the options on screen
- Create a new virtual machine → Open Vm → Connect Server
 - Click on create new
 - It asks choose the Virtual machine
 - It shows guest operation system installation
Click next
 - To select the operation
 - Microsoft
 - Linux
 - Vmware
 - Other
 - then allocate memory choose network
 - Type & select disk type
 - Vm will be created with following procedure.

17/01 Create a Virtual
Virtual machine using VMWare
7. Aim: To create a VM using VMWare
Workstation with 1CPU, 2GB Ram and 15
GB Storage and Canunck.

Procedure:

- Install the Virtualisation software
 - It has Virtualisation as type 2.
 - download an OS Image file.
 - Start VM Ware
 - Configure the hardware setting
 - Install VM and launch
- Explanation:
- VM
 - VMM
 - Virtualisation
 - Types of Virtualisation

Outcome: The VM using Ubuntu Image
has been configured and installed in a
type 2 Hypervisor using VM Workstation.

Output:

Devices	
Memory	2GB
Processor	1
Harddisk	15GB
CD/DVD	AUTO
Network	NAT
USB controller	Present
Display	Auto

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Memory Upgradation

Q. Aim: To create a virtual hard disc for the given virtual machine and allow around 10GB storage from HDD

Procedure:

- firstly launch the vm ware
- under customize hardware → add storage
- select appropriate storage type
- finish configuration
- check to see if the hard disk is added on vm

Outcome: An virtual harddisk has been added inside the vm machine.

Output:

► Devices

Memory

10GB

Processor

2GB

Harddisk

50GB

CD/DVD

Using file C:\Program
Files(x86)VMware

Network

NAT

USB controller

Present

Sound card

Auto

Display

Auto

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Snapshot Creation

9 Aim: To create a snapshot & test to see if the deleted content are restored after reloading.

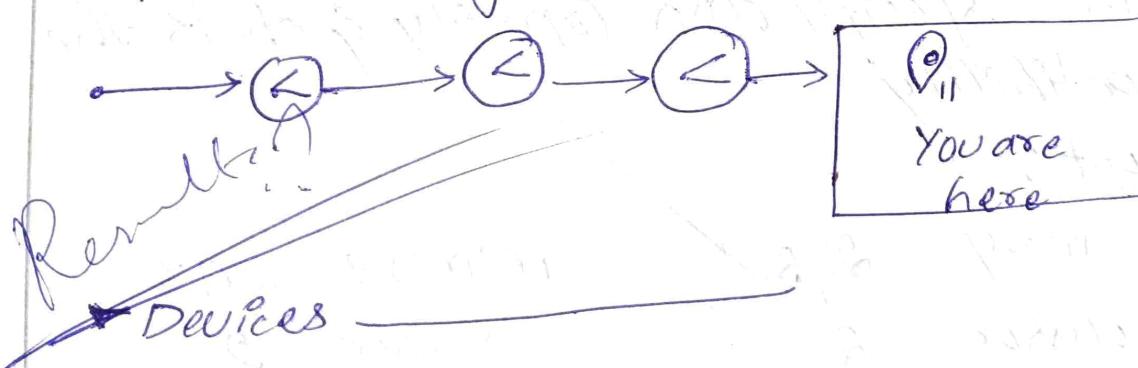
Procedure:

- Create a snapshot of the VM
- Deleted few files and restore the snapshot by launching the snap version of VM
- Shutdown the VM & create a clone of VM under manage VM.
- Open the VMX file from the cloud location of VM & test the cloned version.

Outcome: The Snapshot & clone of the VM has been implemented & tested.

Output:

Snapshot manager:



Memory	2GB
Processor	2
Harddisk	60GB
Network	Present
Sound card	Auto

10. Aim: To create a cloning of VM and test, by loading the previous version (cloned VM).

Procedure:

- Go to VM ware workstation
- Create a Virtual machine with 2GB Ram
- Create a Virtual machine with 4GB
- The cloning of VM

Explanation:

- After Increasing the VM Worstation For installing this we need to check which OS is suitable
- Then select the option as VM ware work
- After installing VM ware → open create new virtual machine
- Then click above option as per your requirement
- Select specify disk capacity & check the compatibility

Output:

Memory	2GB
Processor	2
Hard disk	20GB
CD/DVD	Auto
Network	NAT
User controller	Present

Memory	2GB
Processor	2
Hard disk	20GB
CD/DVD	Auto
Network	NAT
USB controller	Present

Result: The virtual machine P8 created and also verified by giving outputs.

11. Aim: To change the hardware compatibility of a VM either by clone/ create a new Virtual machine.

Procedure:

- Go to VM ware Workstation
- Right click the VM
- Add hardware at a select SCSI controller next
- Click now virtual disk
- Give the name & finish → Automatic
- Maximum size has to be chosen
- Click next then finish
- Change the no. of processor
- Hardware compatibility is changed.
- Select the Specify disk capacity & compare

Output

memory	2GB
Processor	2
Harddisk	20GB
CD/DVD	Auto
Network Adapter	NAT
USB Controller	Present
Sound control	Auto detect

✓ memory	2GB
Processor	3
Harddisk	40GB
CD/DVD	Auto
Network adapter	NAT
USB Controller	Present
Sound control	Auto detect

12.

Aims - To demonstrate Infrastructure as a Service by creating a resource group by using public cloud service providers.

Procedure:

- * Create an account on Azure
- * Go to Resources & create a group
- * Give necessary info & create a VM with your IP and Username & Password.
- * Now Reconfigure the virtual machine
- * Create a new windows virtual machine

Explanation:

- For installing this we need to check which OS is suitable
- Select the option as VM ware workstation.
- After clicking all the required options click finishing & create VM.

Output:

Hithesh
Virtual machine

Connect Start Stop Restart Delete
Properties

Computer name	Hithesh
OS	Linux
VM generation	2
Host group	none
Host	-

Size - Standard	
VCPUs	2
RAM	8 GiB

13.

Aims: To create Infrastructure as a Service by creating a virtual machine using a public cloud service provider.

Procedure:

- Go to [microsoft azure.com](https://microsoftazure.com)
- Create a new account on Microsoft
- Go to Basic group & Create Resource
- Create a Virtual network to create a VM machine
- Now create a Virtual machine with IP & Username & Password.
- And your Virtual machine is developed
- Now connect the Virtual machine & password for Virtual machine & download file to open new window VM

Output

Hithesh
Virtual machine

Connect Start Restart Stop capture

Properties

Computer name : Hithesh

Disk

OS : Linux

OS disk : disk1

Host : None

Encryption : Disable

VM generation : 2

Data disk : 1

Agent status : Ready

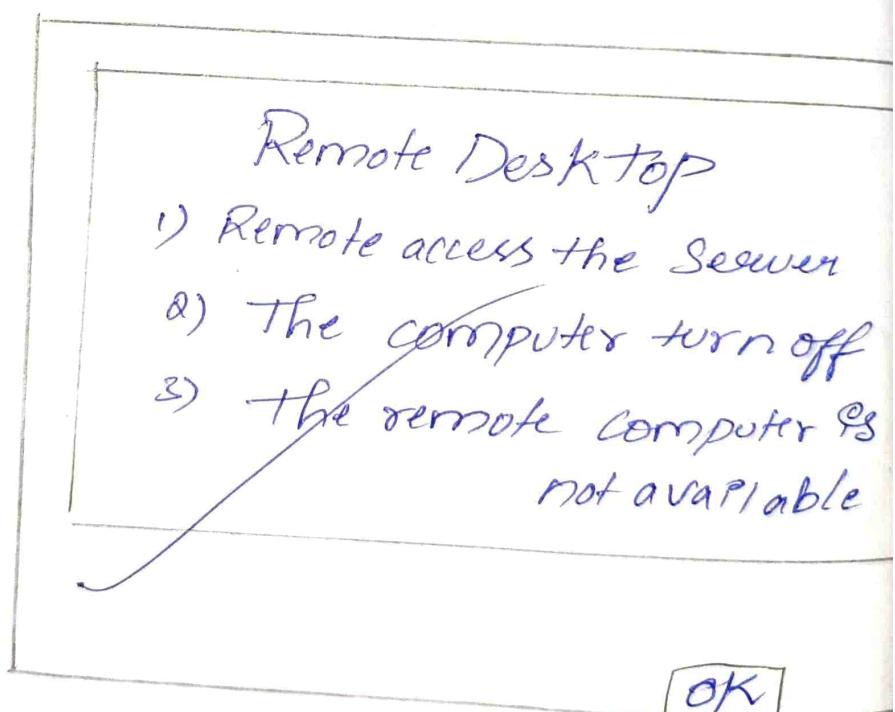
Result: By using the Azure Infrastructure as a service was created & verified successfully.

Q4. Aim: To demonstrate a Infrastructure as a service by establishing remote connection. Launch the VM image & Remote on your desktop.

Procedure:

- Create an account on Azure
- Go to resource group & create a resource
- Create a Virtual network for Virtual machine
- Now Virtual machine is developed
- Create an VM image through console, created Virtual image by specification
- Launch the Virtual machine using image created. You can now access VM remotely.

Output



Result:

Thus the Virtual machine is created & remote connection is established.

15. Aim: To demonstrate PaaS Service & create & configure a new VM Image in cloud Service

Procedure:

- Go to azure portal and Sign on
- Create a new resource then search for web app & click create.
- Choose unique name for Web app Select Subscription.
- Choose runtime stack your web app & config settings
- You can deploy web application code to azure
- Once can be done in various methods like API repository from Virtual studio.
- Deployment is done you receive a URL where you can access the Webapp.

Output



Recyclebin



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16. Aim: Create a simple website using any public cloud service provider (Azure / AWS) and check public accessibility of stored files.

Procedure:

- Give necessary Details On basic and tags and click review.
- Go to Resource group & create a resource group.
- Now the Resource group created go to app services & create webapplication.
- Enter Resource group & webapp name & select region.
- After enter the necessary things click the review.

Output:

HPHost
WebAPP Microsoft Azure
Hey, Node developer
Your app Service is up & running

Result: Thus the web application is created & successfully executed.

Output:

azurerefresh
webapp

Browse Start Swap Delete

^ Essentials

Resourcegroup: httpstestgroup

DefaultDomain:

Status: Stopped

App Service plan

Location: East US

OS: Linux

Web app

Name: azurerefresh

Publish model: code

17.

Aim: To demonstrate storage as a Service
create & configure new VM image on any
public cloud provider.

Procedure:

- Go to Azure
- In azure portal click on create resources
then search for Storage as Service acc
and click create.
- Select the appropriate Performance & replication
option and specify
- Once the Storage account is created navigate
to it ~~Add~~
- Configure container with unique name ~~Set~~ for
container. Set the access level & click
Create.
- upload any file & after uploading the
file you can get its public URL.

Output:

- n ↴

Trash

Terminal

Note Pad

UBUNTU

trash

Result: thus the storage as a service for
migration is created & executed

→ now the migration can be done

18. Create

Aim: To Demonstrate a storage as a service using any public cloud service provider and check the public accessibility

Procedure:

- Go to Azure portal
- Create a new resource then Search for Storage as a account & click create
- Choose a unique name and select appropriate configuration
- Once the Storage Account is created then Create new container.
- Choose the unique name for container
- After uploading file, click on uploaded file & View

Output:

↓
Output

← → ⊞

≡ Renet

webcore.windows.net

Home About Services

We offer Modern Solutions
for Growing Business

Get Started

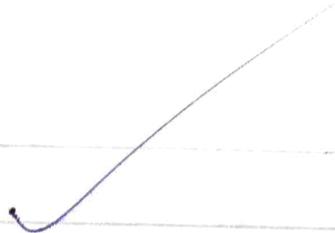
Result:

The storage as a service was created and successfully executed.

19. Aim: - To create a database as a Service Create and configure VM storage on any cloud service provider.
- Procedure:
- Go to Azure
 - Login with your any of your Email
 - Create a SQL Database and select the resource group which was created.
 - Enter the Server name and name of database uniquely.
 - Networking Select allow Azure Service resources to access Services.
 - In additional Settings Sample
 - The Database is Deployed.

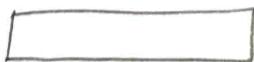
Output:

← → Q



Home →

Microsoft SQL database, new database



✖ cancel

⟳ Refresh

Name
DB

✓ Your deployment is complete

Go to Resources

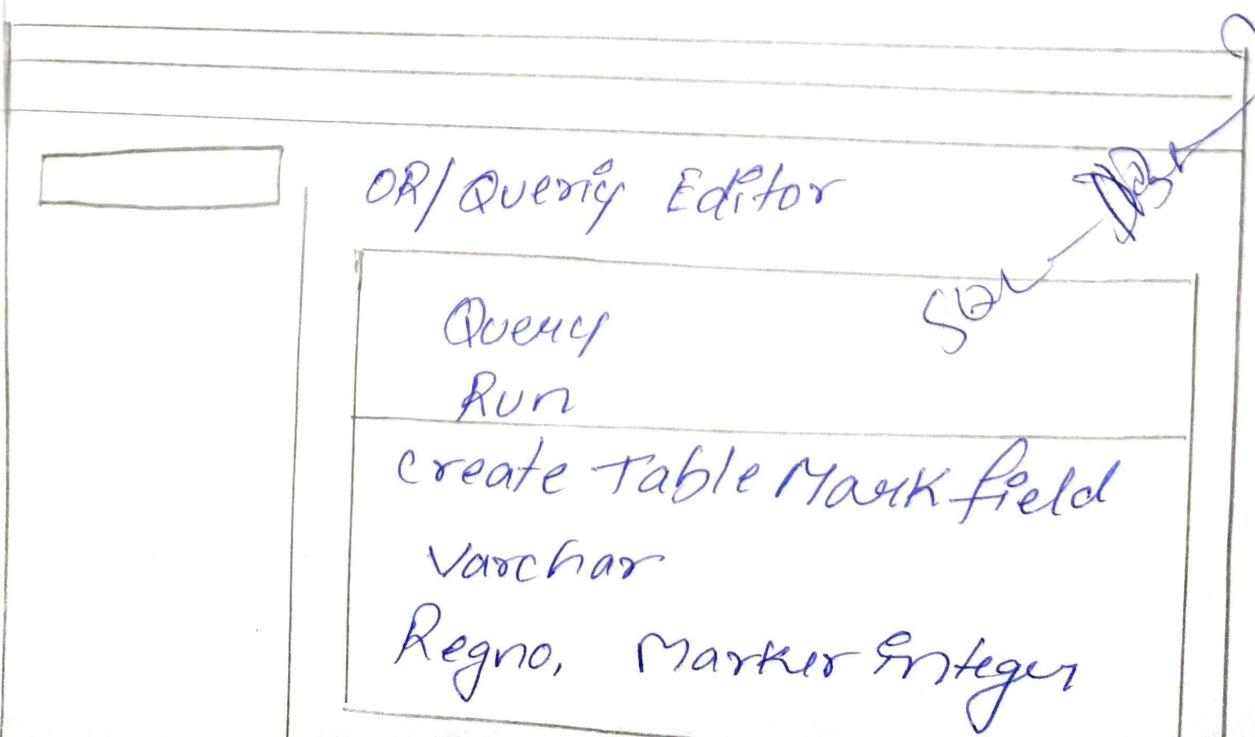
Result: Thus using the VM image created and successfully executed.

Ques.

Aim: To create a SQL storage Service & Perform a Basic query using any cloud service

Procedure:

- Go to Azure
- Log in & now create a Sample resource
- Now create new Service SQL Database & select resource group which was created
- Enter the Servername the name of database. ✓ ~~allow db~~
- On networking select allow azure Service & resources
- In additional setting Select Simple
- Database is being created.
- Now create a table & try to retrieve those database using SQL



Result: The SOPPS created by Silvers, Riley
executed.

Basic Configuration of Hadoop

Ques: To perform the basic configuration for installation of Hadoop like creation & configuration the HDFS and SSH local HDFS.

Procedure:

1) The first thing is setup the web on your system. Run the following commands to proceed.

\$ sudo apt - add - repository ppa: webupd8team

\$ sudo apt - get update

\$ sudo apt - get install oracle - Java & -inst

1) These steps must be followed for installation of Java.

\$ sudo apt - get install hadoop

\$ sudo add user haduser Sudo

1) Install SSH and create configuration

\$ sudo apt - get install ssh

\$ Sudo user

\$ ssh - key gen - tasa - Pxx

output:

Creation of datanode & namenode

Aim: Install hadoop 2.x and configure the name node & data node.

Procedure:

* Make sure we have installed Java on system
if not then

\$ sudo apt update

\$ sudo apt install default-jdk

→ Download Hadoop 2.x package from
site

website & extract it by using

\$ cd / - sudo tar. xzuf hadoop - x.x.x

\$ Edit Basic files or bash - profile to set
necessary environment variables by

\$ Sources ~ / bash rc

* Configure hadoop directory & modify the
Configure files.

\$ cd Hadoop - Home / etc / hadoop

\$ sudo nano hadoop - env. sh

\$ sudo nano core - site. XML

* Add configuration inside

* HDFS site . XML

\$ at \$ home / : ssh : id - rsa. pub >> home / ssh
autosignes

* Click of SSM Work

* Set local host

* Install hadoop

4 Extract hadoop 2.7.2

\$ sudo tar xvzf hadoop-2.7.2.tgz
\$ create a folder "hadoop" in /usr/local/
\$ sudo MK disk-places / hadoop.

Output:

NameNode started at port
8021
DataNode started at port
5431

Result:

The name node & datanode is created &
executed.

23.

Map reducing

Aim: To create a hadoop 2.x & test the map reduce platform with hadoop.

Procedure:

* open terminal

\$ su haduser

password

\$ start dfs and map reduce spt

\$ cd /usr/local/hadoop/hadoop-2.7.2/bin

\$ Start-dfs.sh

\$ start-yarn.sh

* check hadoop through web UI

https://local host:8088

http://local host:50070

* Local new terminal

\$ cd desktop

\$ mvn clean package

\$ cd target

\$ echo Hello hello

\$ cat >hello.txt

g. back bold terminal

\$ hadoop fs -copy from /local/home/Desktop
Inputdata/hello.txt

cl checking hello.txt name node

* Download and open eclipse by creating a new workspace.

Word count

Q4. Aim: To launch hadoop & perform map reduce program for word count problem.

Procedure:

- * open terminal
- * sc hadoop
- * password
- * start dfs & yarn services
 - \$ cd /user/local/hadoop/hadoop-2.7.2/bin
 - \$ start-dfs.sh
 - \$ start-yarn.sh
 - \$ jps
- * check hadoop in web UI
 - ④ Go to browser https://local host:50070
 - https://local host:8088
- * open new terminal
 - \$ cd Desktop
 - \$ mkdir inputdata
 - \$ cd inputdata
 - \$ echo 'Hello, Hello'
 - \$ cat >> Hello.txt
- * Go to the old terminal
 - \$ hadoop fs \$ copy from local /home/hadoop/input data

output:

Result: Thus the Mapreduce program and word count problem is created & executed.