

Ex No: 1
Date:

PROGRAM ON SaaS TO CREATE WORD DOCUMENT

Aim:

To implement program on SaaS to Create an word document of your class time table and store locally and on cloud with doc and PDF format

Procedure:

1. With Google Docs, you can create and edit text documents right in your web browser—no special software is required. Even better, multiple people can work at the same time, you can see people's changes as they make them, and every change is saved automatically.
2. To start, you need a document to work with. In this section

You learn how to:

- a. Create a new document
- b. Import and convert old documents to Docs

Create a new document

(i) You can create a new document right in Docs or in Google Drive. In Docs, click

Create new document.

(ii) In Drive, click New > Google Docs > Blank document or From a template.

Import and convert old documents to Docs

(iii) If you have existing text documents, such as Microsoft Word or Adobe PDF files, you can import and convert them to Docs.

- Go to Drive.
- Click New > File Upload and choose a text document from your computer. Supported files include .doc, .docx, .dot, .html, plain text (.txt), .odt, and .rtf.
- Right-click the file you want to convert and select Open with > Google Docs. Converting your document from another program creates a copy of your original file in Docs format. You can then edit it in your browser like any other document.

Create Class timetable

Share documents

1. Open the file you want to share.
2. Click share.
3. Enter the email addresses or Google Groups you want to share with.

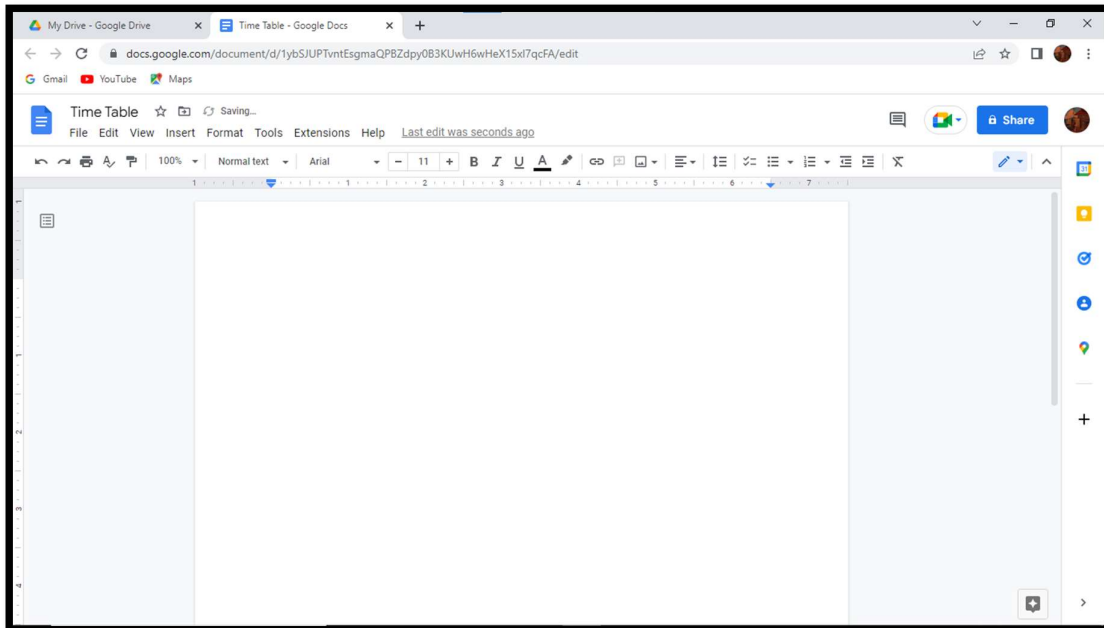
Note: If you can't add people outside your company, see your G Suite administrator.

4. Choose what kind of access you want to grant people:

- **Can edit**—Collaborators can add and edit content as well as add comments.
- **Can comment**—Collaborators can add comments, but not edit content.
- **Can view**—People can view the file, but not edit or add comments. Click Send.

Everyone you shared the document with receives an email with a link to the document.

OUTPUT:



Some Word features can't be displayed in Google Docs and will be dropped if you make changes. [View details](#)

Time Table **DOCX** ☆ ☆

File Edit View Insert Format Tools Help Last edit was 3 minutes ago

CLASS TIME TABLE

ACADEMIC YEAR
Class Room No
Year / Semester

Department/Course
Class In-charge

DAY	PERIOD→	I	II	TEA BREA K	III	IV	V	VI	VII
TIME →		8.45 to 9.40	9.40 to 10.35		10.30 to 11.45	11.45 to 12.40	1.30 to 2.25	2.40 to 3.35	3.35 to 4.30
MONDAY		IOT LAB			IOT LAB		CBT	IOT	PYTHON
TUESDAY		IOT	IOT		PYTHON	CBT LAB	CBT LAB	CBT LAB	
WEDNESDAY		CBT	IOT		IOT	PYTHON LAB	PYTHON LAB	PYTHON LAB	
THURSDAY		PYTHON	E & S		E & S	PYTHON	CBT	PD	
FRIDAY		PYTHON	E & S		E & S	IOT	LIB	CBT	CBT

THEORY:

SUB CODE	TITLE	FACULTY NAME	Hours/Week
4052510	PYTHON PROGRAMMING	P.PRIVA	5
4052520	CLOUD COMPUTING & IOT	S.S.BOOPATHY	6
4052531	COMPONENT BASED TECHNOLOGY	USAILLELA	5

PRACTICALS:

RESULT:

Thus the word document is created, stored and accessed using cloud

Ex No: 2

Date:

PROGRAM ON SAAS TO CREATE SPREADSHEET

Aim:

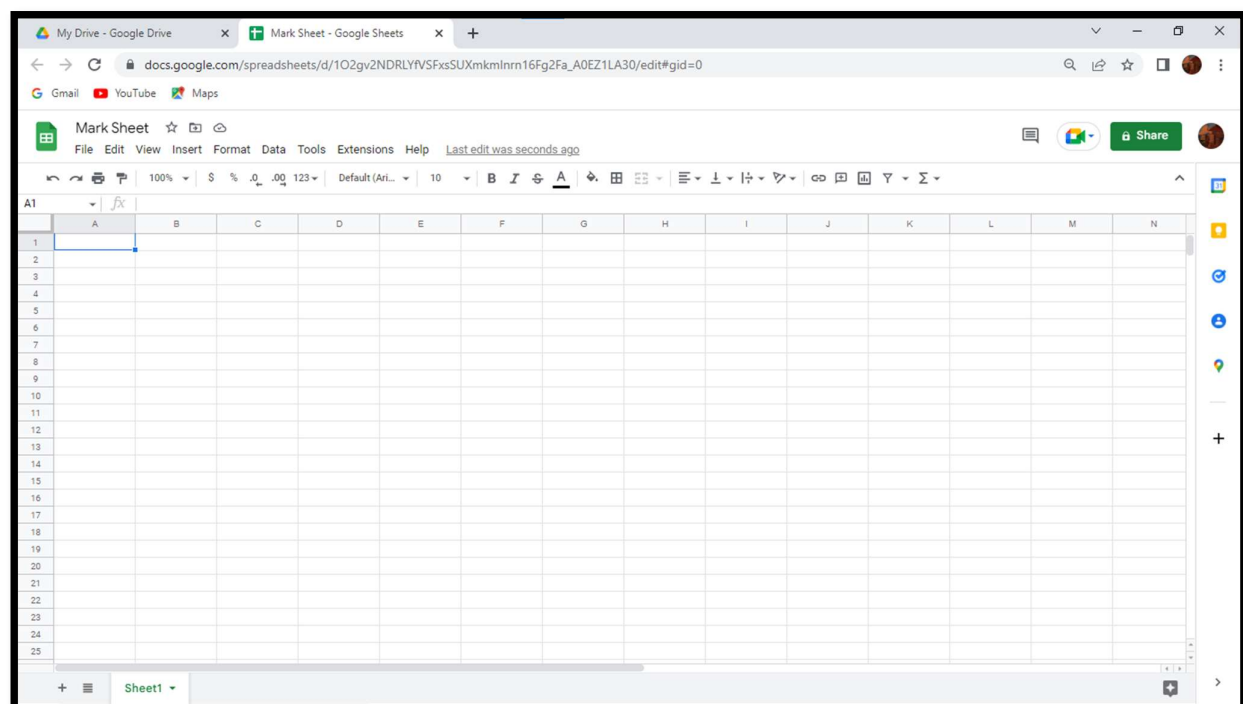
To implement program on SaaS to Create a spread sheet to generate a marksheet for student progress report

Procedure:

If you're accustomed to creating your spread sheets using an office suite or software like Microsoft Excel, you won't have any issue in creating a Google Spread sheet. Google Spread sheet works the same as Excel, and you can do most of the important spread sheet tasks with it. You can use Google Spread sheet directly from your web browser or from its mobile app

1. Sign into Google Sheets. Visit docs.google.com/spreadsheets and sign in with your Google or Gmail account. Your Gmail account gives you free access to Google Sheets.
2. View your existing sheets. Upon logging in, you will be brought to the main directory. If you already have existing spreadsheets, you can see and access them from here.
3. Create a new spreadsheet. Click the large red circle with a plus sign on the lower right corner. A new window or tab will be opened with the web-based spreadsheet.
4. Name the spreadsheet. "Untitled spreadsheet" appears on the top left corner. This is the current name of the spreadsheet. Click on it, and a small window will appear. Type in the name of the spreadsheet here, and click the "OK" button. You will see the name immediately change.

OUTPUT:



My Drive - Google Drive x Mark Sheet.xlsx - Google Sheets x

docs.google.com/spreadsheets/d/1aMPsC7nkqJhbr4p-8Zp8jVC7R4qU/edit#gid=818432202

Gmail YouTube Maps

Mark Sheet .xlsx in cloud computing

File Edit View Insert Format Data Tools Help Last edit was 4 hours ago

100% \$ % .00 123 Calibri 12 B I A

A1:J1 SAKTHI POLYTECHNIC COLLEGE, SAKTHI NAGAR - 638315

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1			SAKTHI POLYTECHNIC COLLEGE, SAKTHI NAGAR - 638315																		
2			COMPUTER ENGINEERING (2021-2022)																		
3			BOARD EXAMINATION MARK ANALYSIS - APRIL 2022																		
4			YEAR / SEM : II / IV																		
5		S.NO.	Roll No	NAME	CA	WP	JAVA	RDBMS	WP LAB	JAVAS LAB	RDBMS LAB	TOTAL	RANK								
6	1	874	NAVEEN KUMAR T	99	96	76	93	99	97	95	655	1									
7	2	801	ANANDHI E	88	86	83	89	95	93	98	632	2									
8	3	810	KRISHNAMOORTHY T	80	87	82	87	98	95	99	628	3									
9	4	821	SUDARSAN P	54	99	79	95	100	100	99	626	4									
10	5	803	DHARUN KUMAR J	69	93	83	78	99	98	99	619	5									
11	6	814	PASUPATHI RAJ KUMAR	84	75	72	92	100	96	100	619	5									
12	7	873	KOKILA M	77	93	57	92	98	94	99	610	7									
13	8	872	KAVIN SANKAR P	77	69	69	87	100	99	99	600	8									
14	9	871	DEEPAKRAGULA	72	66	68	85	97	98	98	584	9									
15	10	824	VOGESHWARI K	86	56	68	86	96	78	98	568	10									
16	11	813	PANJAVARANAM S	88	83	76	66	84	91	78	566	11									
17	12	823	VIGNESH N	79	60	58	48	91	98	86	520	12									
18	13	806	KARTHICK K	63	71	53	63	93	76	74	493	13									
19	14	808	KARUNESH M P	74	65	52	49	93	72	73	478	14									
20	15	807	KARTHIKEYAN K S	47	70	51	49	94	78	71	460	15									
21	16	804	DINESHKUMAR S	52	75	50	48	76	71	67	439	16									
22		Total No. Students		24	24	24	24	24	24	24	24	24									
23		No.Of Students Present		23	23	23	23	23	23	23	23	23									
24		No.Of Students Absent		1	1	1	1	1	1	1	1	1									
25		No.Of Students Pass		22	21	20	19	23	23	23	23	23									
26		No.Of Students Fail		1	2	3	4	NIL	NIL	NIL	NIL	NIL									
27		Percentage (%)		95.65	91.3	86.96	82.61	100	100	100	100	100									

Sheet1

Explore

RESULT:

Thus the Program on saas is implemented by creating spreadsheet and details are entered successfully.

Ex No:3
Date:

BLOGSPOT CREATION

Aim:

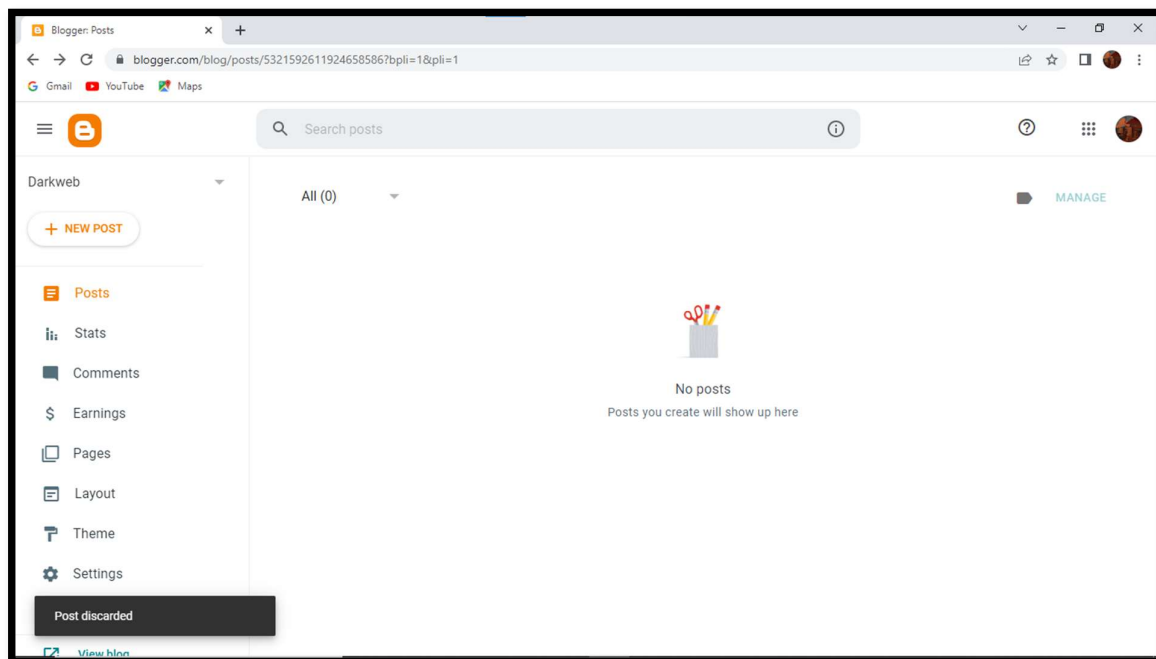
To implement web services by create your BlogSpot and Collaborating via Wikis.

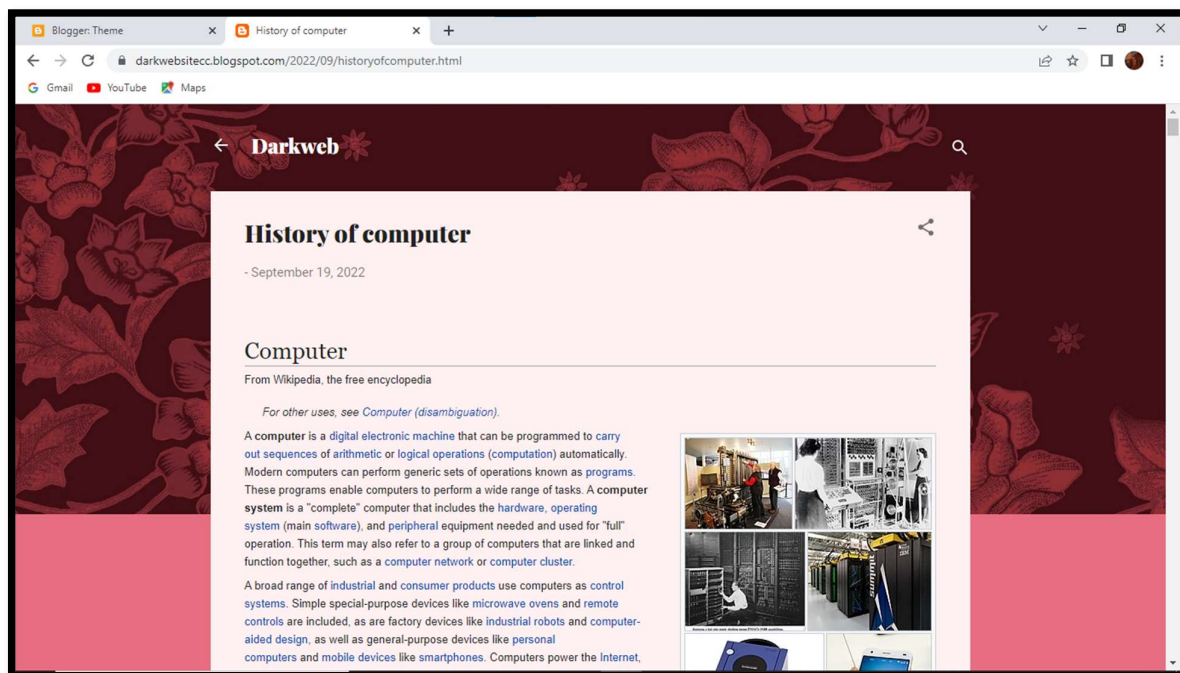
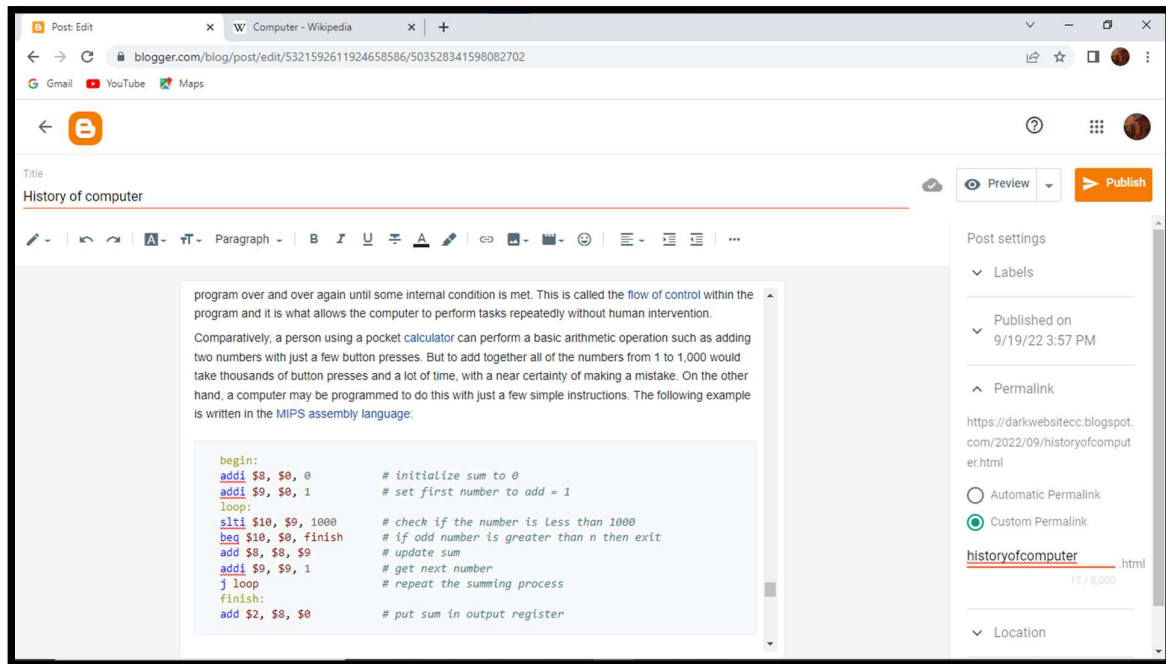
PROCEDURE:

CREATE A BLOG:

1. Search in Google as "blogger", there are many websites to create blogs. Let us take www.blogger.com.
2. Click on create blog. Sign in to your Google account
3. Choose a name for your blog and click on next.
4. Create the blog name click on next.
5. Type the display name and click on Finish
6. Click on create post and update your post in the displayed file and publish.
7. You can apply theme and create many post and labels in your blog and customize it.
8. Finally click on view blog from the menu and you can view the blog which you have created
9. In the blog site ,you can share on your own blog in any social medias and wikkis

OUTPUT:





RESULT:

Thus the log is created and collaborated successfully

Ex No:4

Date:

GOOGLE APP ENGINE

Aim:

To implement on PaaS to Install Google App Engine, create a program to validate user; create a database login(username, password)in mysql and deploy to cloud

Procedure:

- Create a Compute Engine instance
- Install MySQL
- Connect to MySQL

Create a Compute Engine instance

Create a new project in the Google Cloud console. You can use an existing project, but creating a new project makes cleanup easier.

You can complete all of the steps in this document using the Google Cloud console, but if you prefer to use the gcloud CLI, follow these steps to enable the Compute Engine API and install the Google Cloud CLI.

- Use the Google Cloud console to enable the Compute Engine API.
- Install the gcloud CLI
- Configure your workspace to make commands less verbose. Substitute your project's values for PROJECT_ID and ZONE in the following commands. For the full list of zones, see Available regions & zones.

```
gcloud config set project PROJECT_ID
```

```
gcloud config set compute/zone ZONE
```

Create a Compute Engine instance for MySQL and establish an SSH connection to the newly created instance. The default operating system is Debian version 10. If you prefer to use a different operating system for this tutorial, you can choose from the options described on the public images page in the Compute Engine documentation.

To create a Compute Engine instance in the Google Cloud console:

1. Open the Google Cloud console.
2. Select your newly created project and click **Continue**.
3. Click **Create instance** (**New instance** if you have existing instances). Name the instance **mysql-test**.
4. To specify an operating system other than the default value, in the **Boot disk** section, click **Change** to configure the properties for the boot disk. In the **Public images** tab, select an operating system and then click **Save**.
5. Click **Create**.

To establish an SSH connection:

1. On the **VM instances** page, find your new VM instance in the list.
2. In the **Connect** column, click **SSH**. The SSH terminal opens in a browser window.

Install MySQL

The following steps describe how to install MySQL on your Compute Engine instance.

Versions 10 and later of Debian contain MariaDB instead of MySQL as part of its package management system. MariaDB maintains compatibility with the MySQL protocol, but has an independently evolving feature set. For more details, see [MariaDB vs. MySQL](#).

To install MySQL, download the release package and manually install using the `dpkg` command.

1. Install the `wget` dependency.

```
sudo apt-get install -y wget
```

2. Download the MySQL Community Server release package.

```
export DEB_FILE=mysql-apr-config_0.8.20-1_all.debcd /tmp  
curl -L --output ${DEB_FILE} \ https://dev.mysql.com/get/${DEB_FILE}
```

3. Verify the integrity of the release package file. `cat >`

```
${DEB_FILE}.md5 << EOL  
799bb0aefb93d30564fa47fc5d089aeb ${DEB_FILE}EOL  
md5sum --check ${DEB_FILE}.md5
```

4. The authenticity and integrity of the file are verified if you see the following output.

```
mysql-apr-config_0.8.20-1_all.debcd: OK
```

5. After you have verified the file, add the MySQL package to the local package repository.

```
sudo dpkg -i ${DEB_FILE}
```

6. With the top MySQL Server & Cluster menu option selected, press Return and then use the arrow keys to choose a server version.

7. This guide expects you to choose either MySQL 8.0 or 5.7. Press Return on your keyboard after you have selected the version.

8. When you are satisfied with the options selected in the configuration menu, use the arrow keys to select Ok in the menu and press Return on your keyboard.

9. Update the package cache.

```
sudo apt-get update
```

10. Install MySQL. The installation process starts the MySQL service for you.

```
sudo apt-get -y install mysql-community-server
```

11. You are prompted to provide some details for the installation such as the root password.

Connect to MySQL

1. Connect to MySQL using the MySQL client.

```
sudo mysql -u root -p
```

When you connect to MySQL, the prompt changes to mysql>

You can then run MySQL commands. For example, the following command shows the threads running, including the current connection.

```
Mysql> SHOW processlist;
```

You can use the following command to generate a list of users.

```
Mysql> SELECT User, Host, authentication_string FROM mysql.user;
```

```
Mysql> exit
```

OUTPUT:

```
ubuntu@ip-172-31-29-250: ~  
ubuntu@ip-172-31-29-250:~$ sudo apt install mysql-server+  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
The following additional packages will be installed:  
  libaio1 libcgi-fast-perl libcgi-pm-perl libencode-locale-perl  
  libevent-core-2.1-6 libfcgi-perl libhtml-parser-perl libhtml-tagset-perl  
  libhtml-template-perl libhttp-date-perl libhttp-message-perl libio-html-perl  
  liblwp-mediatypes-perl libtimedate-perl liburi-perl mysql-client-5.7  
  mysql-client-core-5.7 mysql-common mysql-server-5.7 mysql-server-core-5.7  
Suggested packages:  
  libdata-dump-perl libipc-sharedcache-perl libwww-perl mailx tinycsa  
The following NEW packages will be installed:  
  libaio1 libcgi-fast-perl libcgi-pm-perl libencode-locale-perl  
  libevent-core-2.1-6 libfcgi-perl libhtml-parser-perl libhtml-tagset-perl  
  libhtml-template-perl libhttp-date-perl libhttp-message-perl libio-html-perl  
  liblwp-mediatypes-perl libtimedate-perl liburi-perl mysql-client-5.7  
  mysql-client-core-5.7 mysql-common mysql-server mysql-server-5.7  
  mysql-server-core-5.7  
0 upgraded, 21 newly installed, 0 to remove and 0 not upgraded.  
Need to get 20.0 MB of archives.  
After this operation, 157 MB of additional disk space will be used.  
Do you want to continue? [Y/n] y  
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 mysql-com  
mon all 5.8+1.0.4 [7308 B]  
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 l  
ibaio1 amd64 0.3.110-5ubuntu0.1 [6476 B]  
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 m  
ysql-client-core-5.7 amd64 5.7.39-0ubuntu0.18.04.2 [6746 kB]  
Get:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 m  
ysql-client-5.7 amd64 5.7.39-0ubuntu0.18.04.2 [2026 kB]  
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 m  
ysql-server-core-5.7 amd64 5.7.39-0ubuntu0.18.04.2 [7531 kB]  
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 libevent-  
core-2.1-6 amd64 2.1.8-stable-4build1 [85.9 kB]  
Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 m  
ysql-server-5.7 amd64 5.7.39-0ubuntu0.18.04.2 [3001 kB]  
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 libhtml-t  
agset-perl all 3.20-3 [12.1 kB]  
Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 liburi-pe  
rl all 1.73-1 [77.2 kB]  
Get:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 libhtml-  
parser-perl amd64 3.72-3build1 [85.9 kB]  
Get:11 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 libcgi-p
```

```
ubuntu@ip-172-31-29-250: ~  
NO)  
ubuntu@ip-172-31-29-250:~$ mysql --version  
mysql Ver 14.14 Distrib 5.7.39, for Linux (x86_64) using EditLine wrapper  
ubuntu@ip-172-31-29-250:~$ sudo mysql_secure_installation  
  
Securing the MySQL server deployment.  
  
Connecting to MySQL using a blank password.  
  
VALIDATE PASSWORD PLUGIN can be used to test passwords  
and improve security. It checks the strength of password  
and allows the users to set only those passwords which are  
secure enough. Would you like to setup VALIDATE PASSWORD plugin?  
  
Press y|Y for Yes, any other key for No: y  
  
There are three levels of password validation policy:  
  
LOW Length >= 8  
MEDIUM Length >= 8, numeric, mixed case, and special characters  
STRONG Length >= 8, numeric, mixed case, special characters and dictionary  
file  
  
Please enter 0 = LOW, 1 = MEDIUM and 2 = STRONG: 0  
Please set the password for root here.  
  
New password:  
  
Re-enter new password:  
  
Estimated strength of the password: 50  
Do you wish to continue with the password provided?(Press y|Y for Yes, any other  
key for No) : y  
By default, a MySQL installation has an anonymous user,  
allowing anyone to log into MySQL without having to have  
a user account created for them. This is intended only for  
testing, and to make the installation go a bit smoother.  
You should remove them before moving into a production  
environment.  
  
Remove anonymous users? (Press y|Y for Yes, any other key for No) : y  
Success.
```

```
ubuntu@ip-172-31-29-250: ~  
  
Remove anonymous users? (Press y|Y for Yes, any other key for No) : y  
Success.  
  
Normally, root should only be allowed to connect from  
'localhost'. This ensures that someone cannot guess at  
the root password from the network.  
  
Disallow root login remotely? (Press y|Y for Yes, any other key for No) : y  
Success.  
  
By default, MySQL comes with a database named 'test' that  
anyone can access. This is also intended only for testing,  
and should be removed before moving into a production  
environment.  
  
Remove test database and access to it? (Press y|Y for Yes, any other key for No)  
: n  
... skipping.  
Reloading the privilege tables will ensure that all changes  
made so far will take effect immediately.  
  
Reload privilege tables now? (Press y|Y for Yes, any other key for No) : y  
Success.  
  
All done!  
ubuntu@ip-172-31-29-250:~$ sudo mysql -u root -p  
Enter password:  
Welcome to the MySQL monitor. Commands end with ; or \g.  
Your MySQL connection id is 6  
Server version: 5.7.39-0ubuntu0.18.04.2 (Ubuntu)  
  
Copyright (c) 2000, 2022, Oracle and/or its affiliates.  
  
Oracle is a registered trademark of Oracle Corporation and/or its  
affiliates. Other names may be trademarks of their respective  
owners.  
  
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
```

RESULT:

Thus mysql is installed successfully in Google compute engine using Paas services

Ex No:5

Date:

LINUX INSTALLATION USING VMware

Aim:

To Install VMware Workstation with different flavours of Linux or Windows OS on top of windows 7 or 8

Procedure:

Step 1: Install VMware

Step 2: Download ISO file from linux website

Step 3: Open VMWare

Step 4: Click "Open a Virtual Machine "

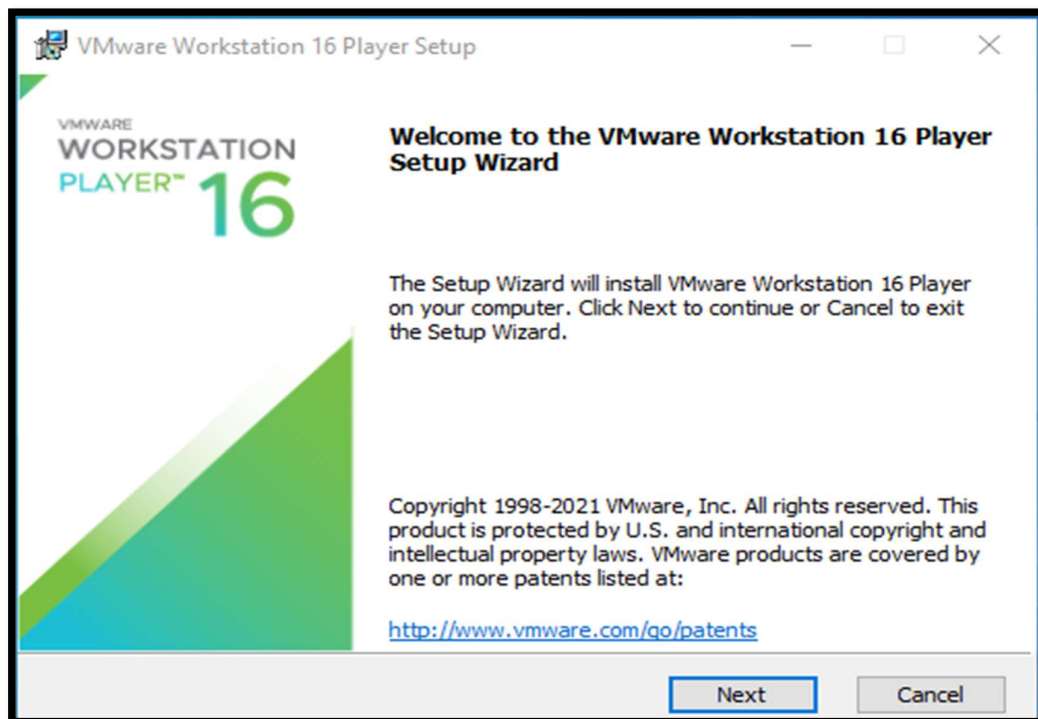
Step 5: Brows VM ware File in File Manager

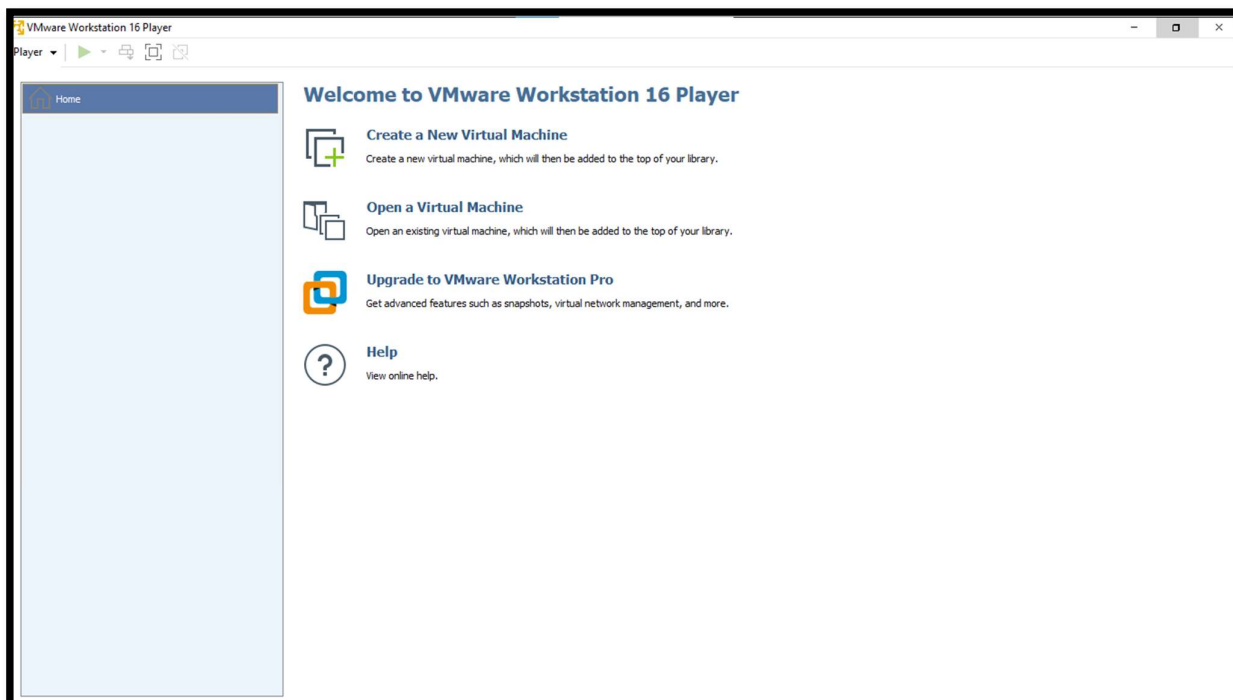
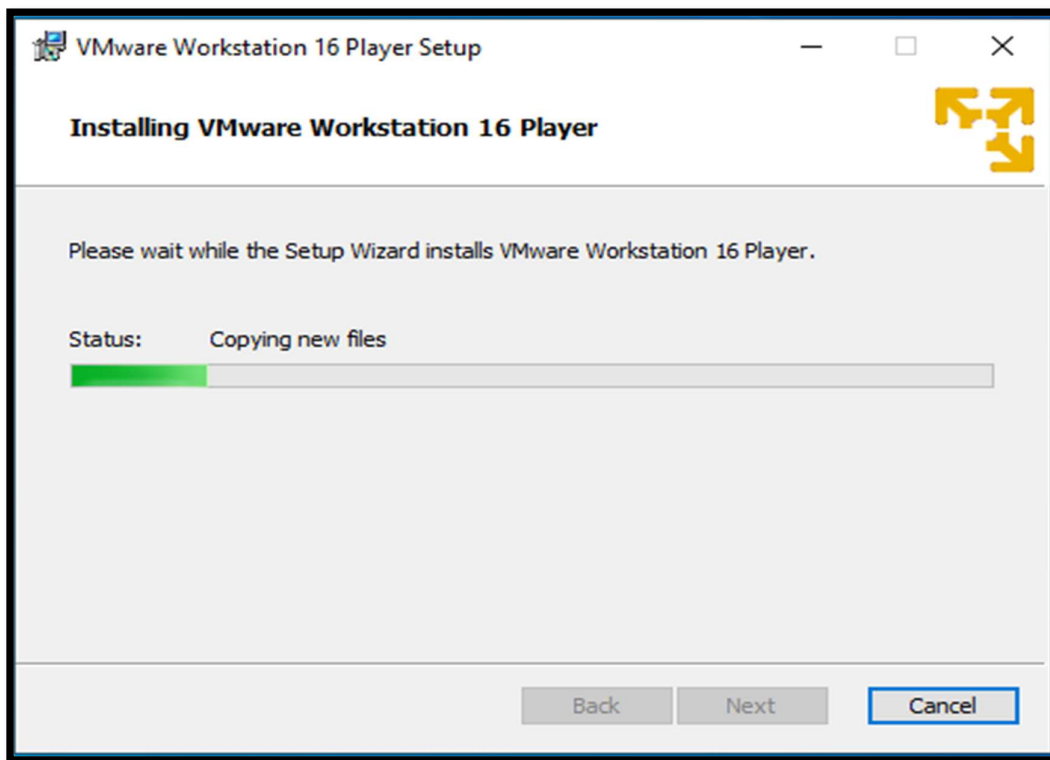
Step 6: Click Open

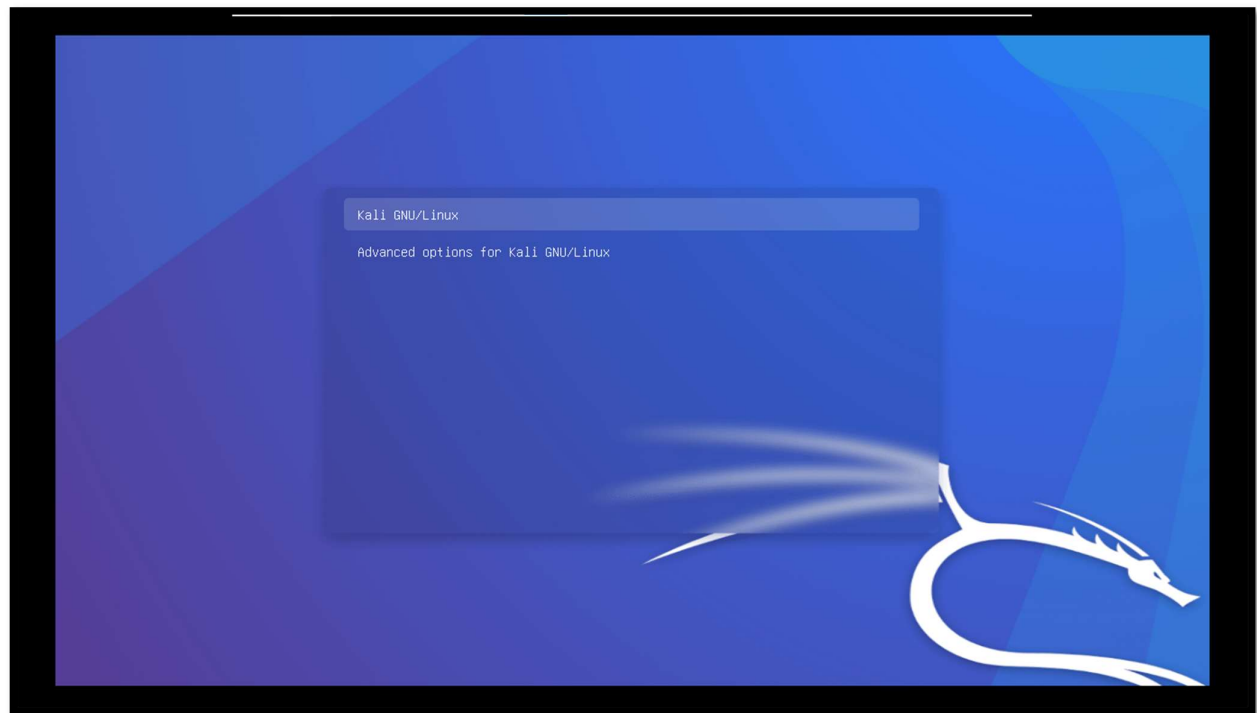
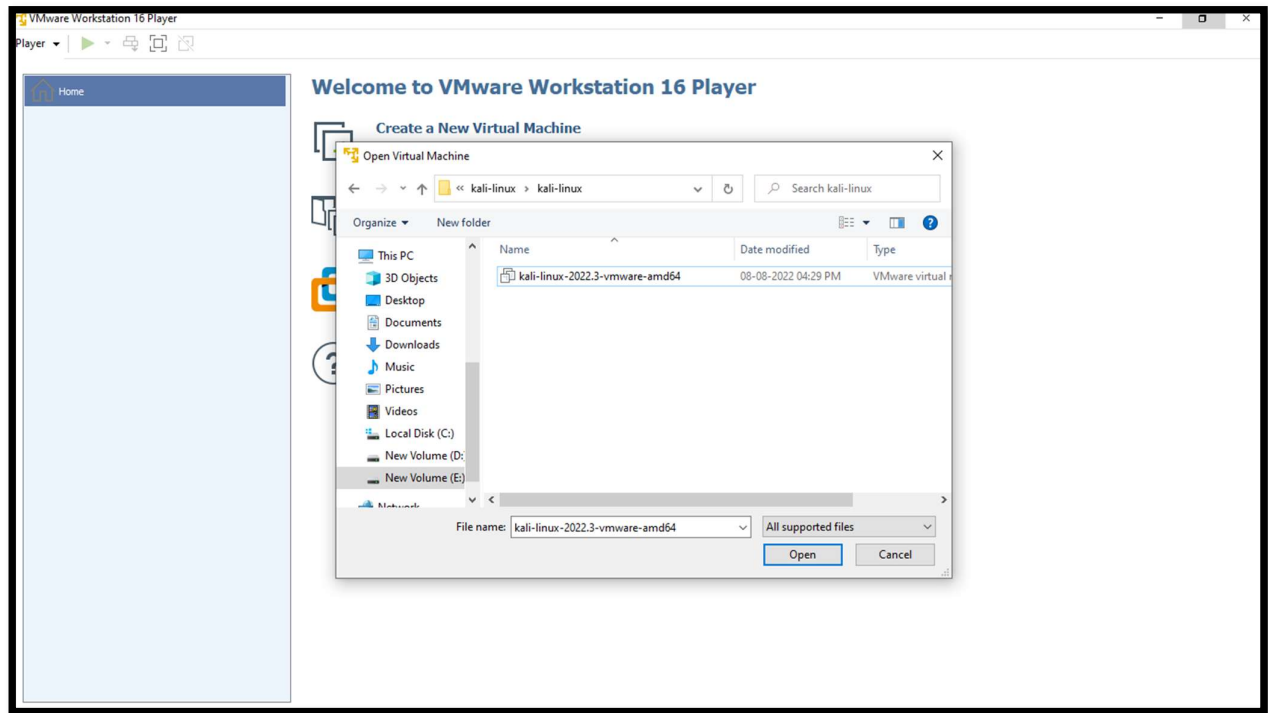
Step 7: Click Run Virtual Machine.

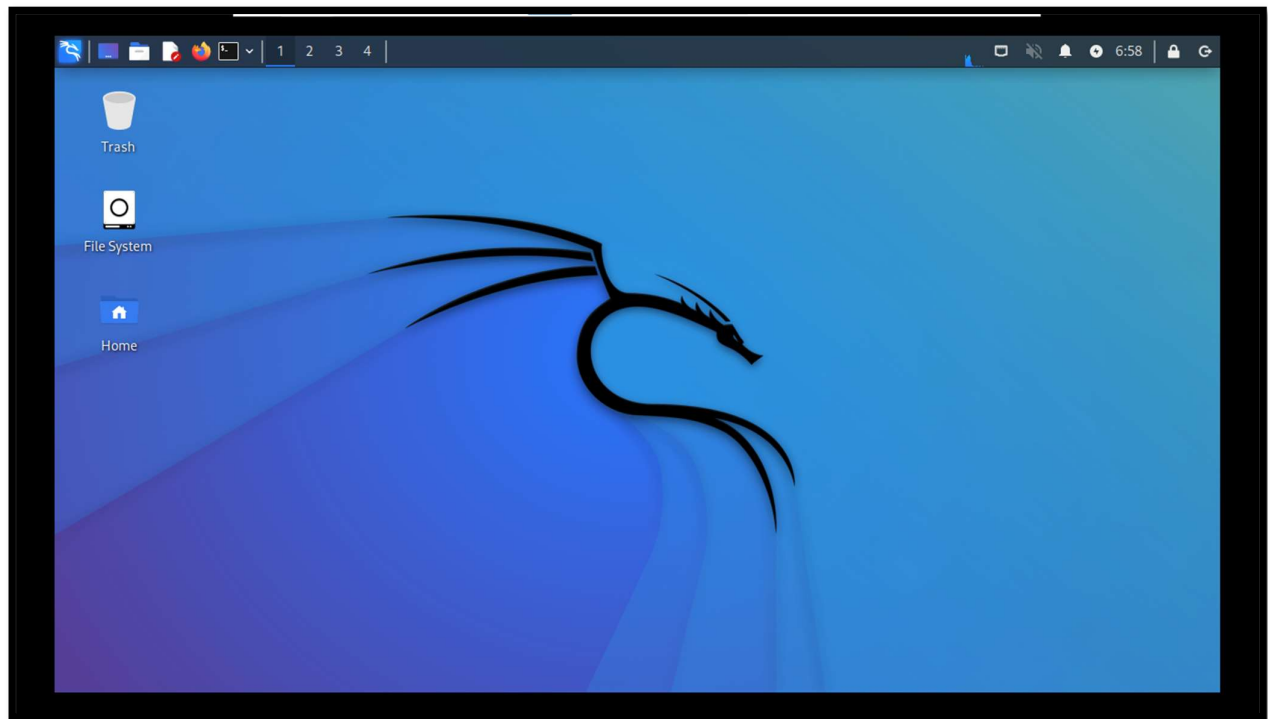
Your OS will Installed Successfully

OUTPUT:









RESULT:

Thus the Linux os is installed in the virtual box successfully.

Ex No:6
Date:

OPEN STACK INSTALLATION

Aim:

To install the open stack and use it as a infrastructure as a service and Use technology own cloud

Procedure:

Steps to install openstack on Ubuntu 18.04 in Virtual box

- 1)First install virtual box <https://www.virtualbox.org/wiki/Downl...>
- 2)Download Ubuntu 18.04 ISO <https://releases.ubuntu.com/18.04/>
- 3)Create Ubuntu 18.04 VM in Virtual box 4 GB RAM + 2 vCPUs Hard disk capacity of Min 10 GB
- 4)After succesful installation of ubuntu ,start Openstack installation

Execute below steps in terminal:

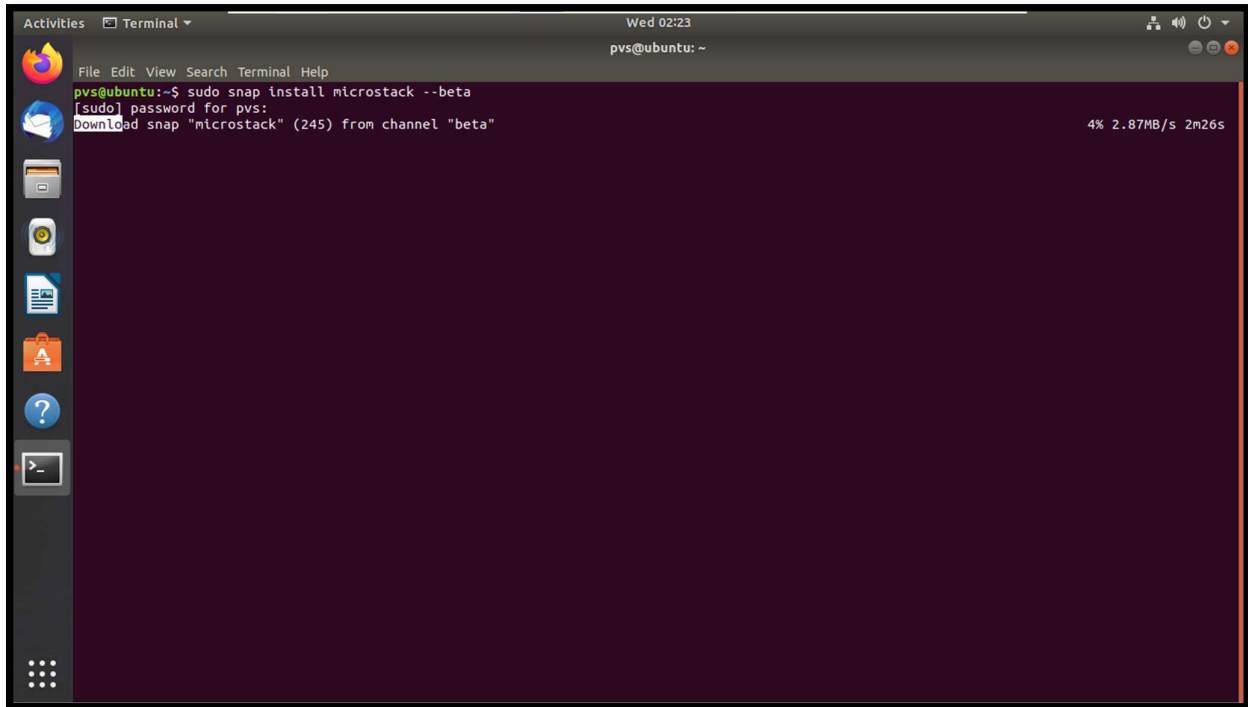
```
sudo snap install microstack --beta
snap list microstack
sudo microstack init --auto --control
sudo apt install net-tools
```

ifconfig

After Successfully installation of Openstack access the Horizon dashboard with below URL:

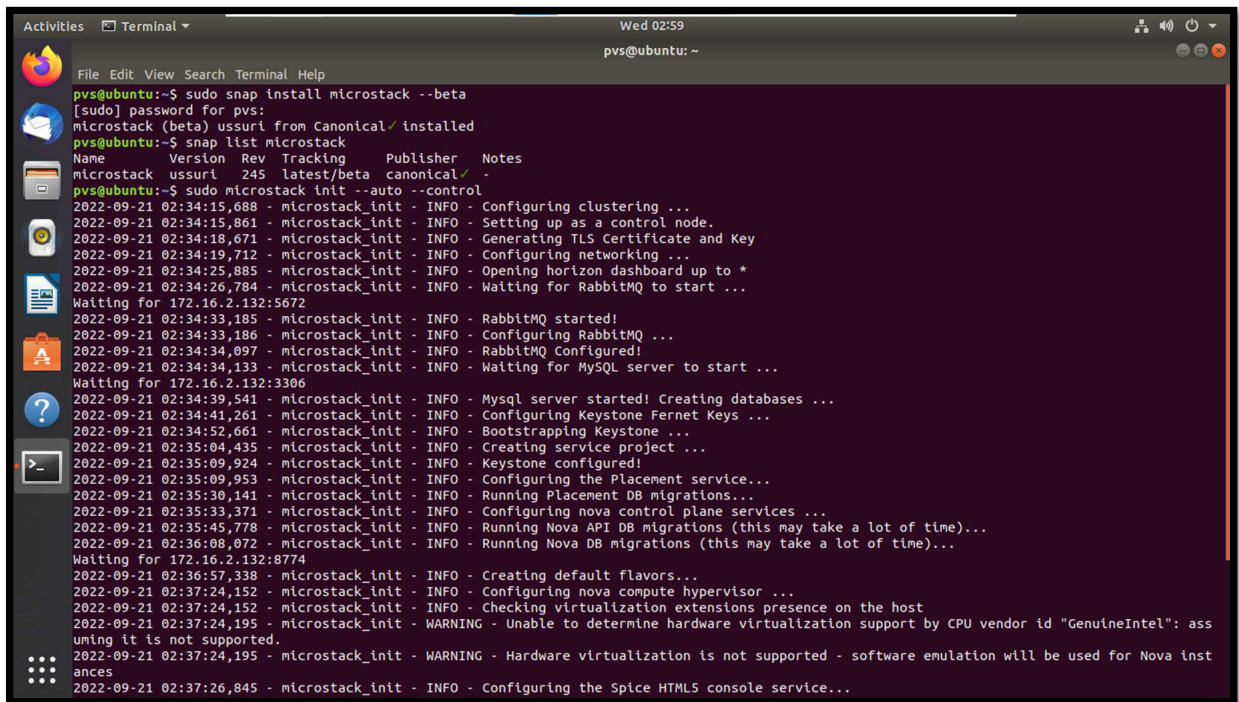
<http://10.20.20.1/dashboard>

OUTPUT:



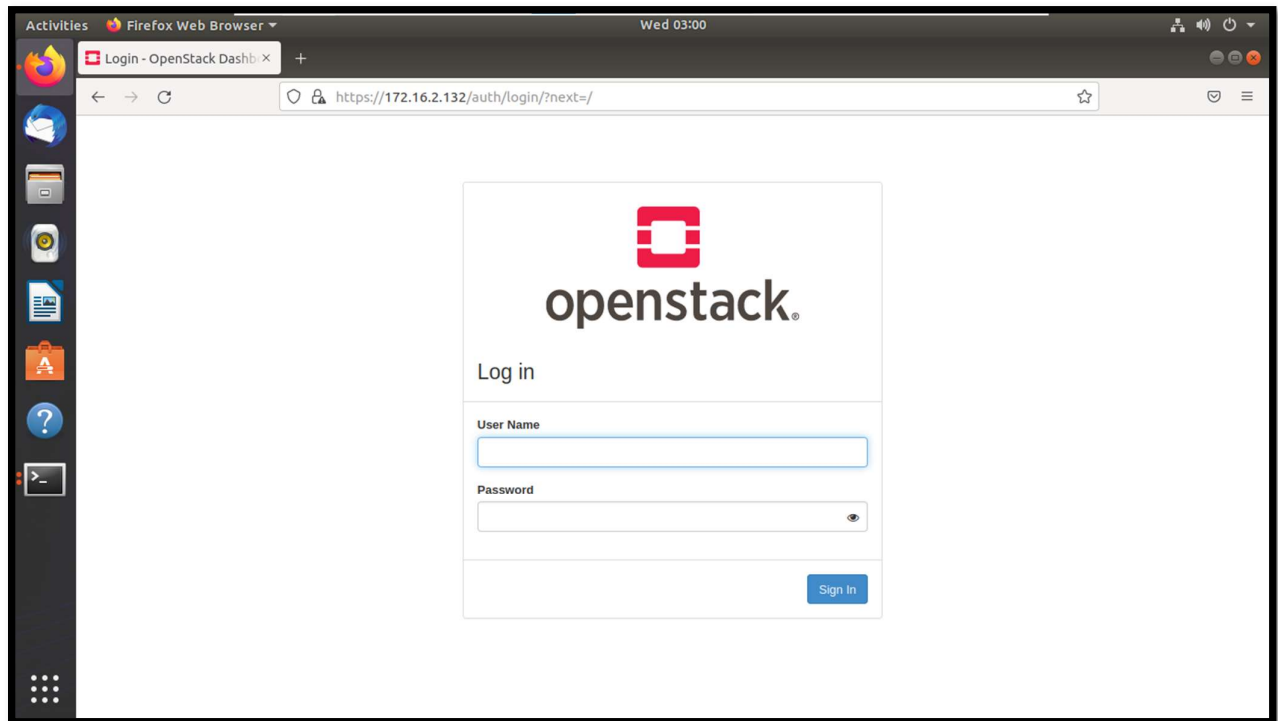
A terminal window titled 'Terminal' with a menu bar (File, Edit, View, Search, Terminal, Help) and a status bar (Wed 02:23, pvs@ubuntu: ~). The terminal shows the command `sudo snap install microstack --beta` being executed. A password prompt is shown, and the output indicates that the snap 'microstack' (245) is being downloaded from the 'beta' channel at a rate of 4% (2.87MB/s) and has been running for 2m26s.

```
File Edit View Search Terminal Help
pvs@ubuntu:~$ sudo snap install microstack --beta
[sudo] password for pvs:
Download snap "microstack" (245) from channel "beta" 4% 2.87MB/s 2m26s
```



A terminal window titled 'Terminal' with a menu bar (File, Edit, View, Search, Terminal, Help) and a status bar (Wed 02:59, pvs@ubuntu: ~). The terminal shows the command `sudo snap install microstack --beta` being executed. A password prompt is shown, and the output indicates that the snap 'microstack' (245) is being downloaded from the 'beta' channel at a rate of 4% (2.87MB/s) and has been running for 2m26s. The terminal then shows the command `sudo microstack init --auto --control` being executed. The output shows a series of log messages indicating the progress of the initialization process, including configuring clustering, setting up as a control node, generating TLS certificate and key, configuring networking, opening horizon dashboard, waiting for RabbitMQ to start, RabbitMQ started, configuring RabbitMQ, RabbitMQ configured, waiting for MySQL server to start, MySQL server started, creating databases, configuring Keystone Fernet keys, bootstrapping Keystone, creating service project, Keystone configured, configuring the Placement service, running Placement DB migrations, configuring nova control plane services, running Nova API DB migrations, running Nova DB migrations, creating default flavors, configuring nova compute hypervisor, checking virtualization extensions presence on the host, warning that hardware virtualization support is not supported, warning that hardware virtualization is not supported, and configuring the Spice HTML5 console service.

```
File Edit View Search Terminal Help
pvs@ubuntu:~$ sudo snap install microstack --beta
[sudo] password for pvs:
microstack (beta) ussuri from Canonical ✓ installed
pvs@ubuntu:~$ sudo snap list microstack
Name      Version Rev Tracking Publisher Notes
microstack ussuri 245 latest/beta canonical ✓ -
pvs@ubuntu:~$ sudo microstack init --auto --control
2022-09-21 02:34:15,688 - microstack_init - INFO - Configuring clustering ...
2022-09-21 02:34:15,861 - microstack_init - INFO - Setting up as a control node.
2022-09-21 02:34:18,671 - microstack_init - INFO - Generating TLS Certificate and Key
2022-09-21 02:34:19,712 - microstack_init - INFO - Configuring networking ...
2022-09-21 02:34:25,885 - microstack_init - INFO - Opening horizon dashboard up to *
2022-09-21 02:34:26,784 - microstack_init - INFO - Waiting for RabbitMQ to start ...
Waiting for 172.16.2.132:5672
2022-09-21 02:34:33,185 - microstack_init - INFO - RabbitMQ started!
2022-09-21 02:34:33,186 - microstack_init - INFO - Configuring RabbitMQ ...
2022-09-21 02:34:34,097 - microstack_init - INFO - RabbitMQ Configured!
2022-09-21 02:34:34,133 - microstack_init - INFO - Waiting for MySQL server to start ...
Waiting for 172.16.2.132:3306
2022-09-21 02:34:39,541 - microstack_init - INFO - Mysql server started! Creating databases ...
2022-09-21 02:34:41,261 - microstack_init - INFO - Configuring Keystone Fernet Keys ...
2022-09-21 02:34:52,661 - microstack_init - INFO - Bootstrapping Keystone ...
2022-09-21 02:35:04,435 - microstack_init - INFO - Creating service project ...
2022-09-21 02:35:09,924 - microstack_init - INFO - Keystone configured!
2022-09-21 02:35:09,953 - microstack_init - INFO - Configuring the Placement service...
2022-09-21 02:35:30,141 - microstack_init - INFO - Running Placement DB migrations...
2022-09-21 02:35:33,371 - microstack_init - INFO - Configuring nova control plane services ...
2022-09-21 02:35:45,778 - microstack_init - INFO - Running Nova API DB migrations (this may take a lot of time)...
2022-09-21 02:36:08,072 - microstack_init - INFO - Running Nova DB migrations (this may take a lot of time)...
Waiting for 172.16.2.132:8774
2022-09-21 02:36:57,338 - microstack_init - INFO - Creating default flavors...
2022-09-21 02:37:24,152 - microstack_init - INFO - Configuring nova compute hypervisor ...
2022-09-21 02:37:24,152 - microstack_init - INFO - Checking virtualization extensions presence on the host
2022-09-21 02:37:24,195 - microstack_init - WARNING - Unable to determine hardware virtualization support by CPU vendor id "GenuineIntel": ass
uming it is not supported.
2022-09-21 02:37:24,195 - microstack_init - WARNING - Hardware virtualization is not supported - software emulation will be used for Nova inst
ances
2022-09-21 02:37:26,845 - microstack_init - INFO - Configuring the Spice HTML5 console service...
```

RESULT:

Thus the open stack is installed successfully in the virtual box

Ex No:7

Date:

CASE STUDY Amazon EC2 and Azure

AIM:

Case study on open source and commercial cloud.

THEORY:

Amazon Web Services (AWS) and Microsoft Azure are the two giants in the world of cloud computing.

While AWS is the largest cloud computing platform, Microsoft Azure is the fastest-growing and second-largest.

Azure is a cloud computing platform and an online portal that allows you to access and manage cloud services and resources provided by Microsoft. These services and resources include storing your data and transforming it, depending on your requirements. To get access to these resources and services, all you need to have is an active internet connection and the ability to connect to the Azure portal.

Azure provides more than 200 services, are divided into 18 categories. These categories include computing, networking, storage, IoT, migration, mobile, analytics, containers, artificial intelligence, and other machine learning, integration, management tools, developer tools, security, databases, DevOps, media identity, and web services.

Amazon Elastic Compute Cloud (Amazon EC2) provides scalable computing capacity in the Amazon Web Services (AWS) Cloud. Using Amazon EC2 eliminates your need to invest in hardware up front, so you can develop and deploy applications faster. You can use Amazon EC2 to launch as many or as few virtual servers as you need, configure security and networking, and manage storage. Amazon EC2 enables you to scale up or down to handle changes in requirements or spikes in popularity, reducing your need to forecast traffic.