Creating a Free VM on Google Cloud Platform (GCP)

1. Creating a Project

- Go to the GCP console (https://cloud.google.com/).
- Create a new project. Name that i have given is virtual machine.

2. Enabling Compute Engine API

- In the navigation menu, go to **APIs & Services** > **Library**.
- Search for "Compute Engine API" and i had enabled it.
- It asks for a one time payment of 1000rs

3. Creating a VM Instance

- In the navigation menu, go to **Compute Engine** > **VM instances**.
- Click **Create**.
- **Name:** Give your VM a name.(task11)
- **Machine type:** Choose a free tier machine type (e.g., "e2-small").
- **Boot disk:** Use a default boot disk.
- **Network:** Choose the default network.
- **Firewall rules:** Allow SSH traffic from your IP address.
- Click **Create**.
- Here a virtual machine is created.

4. Getting the VM's External IP Address

- Once the VM is created, we can see its details in the VM instances list.
- Note down the **External IP** address.

5. Pinging the VM from Kali Linux

- Open a terminal on Kali Linux machine.
- Use the `ping` command to ping the VM's external IP address.
- ping <ip address>
- If the ping is successful, There will be responses.

6. Connecting to the VM via SSH

- Open a terminal on Kali Linux machine.
- Use the `ssh` command to connect to the VM : ssh username@<ip address>
- Enter the password that have been set for GCP account.

7. Running ip a and Taking a Screenshot

- Once connected to the VM, run the `ip a` command to display network interface information.
- Take a screenshot of the output.

8. Pinging the Public IP from the VM

- Use the `ping` command within the VM to ping its own public IP address.
- It should be able to ping it successfully.

9. Shutting Down

- To shut down the VM,we can use the `sudo shutdown -h now` command.

10. Terminating the VM

- Go back to the GCP console and select the VM instance you created.
- Click the **Delete** button.