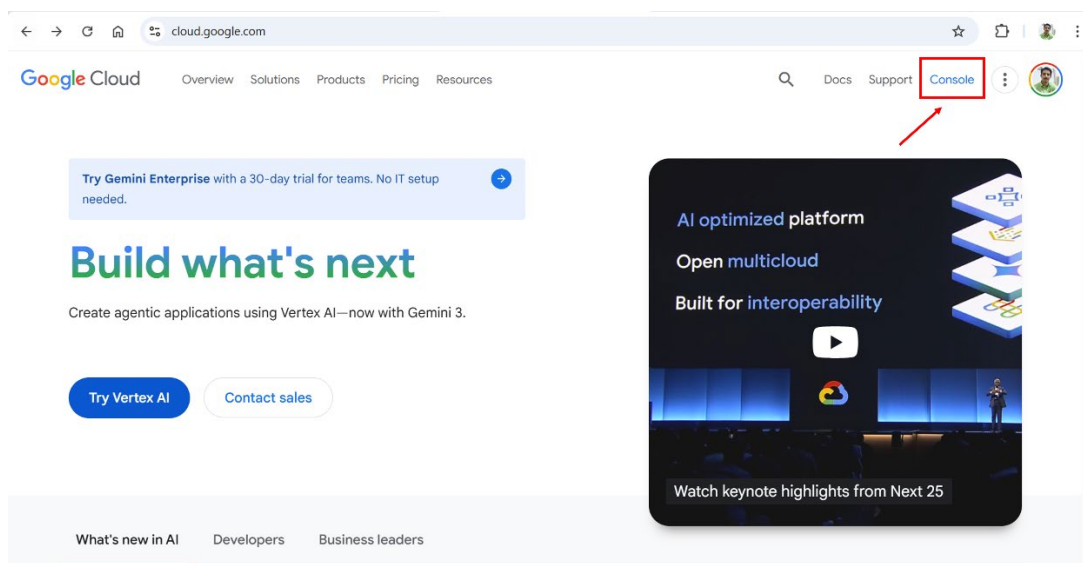


CLOUD COMPUTING LABORATORY

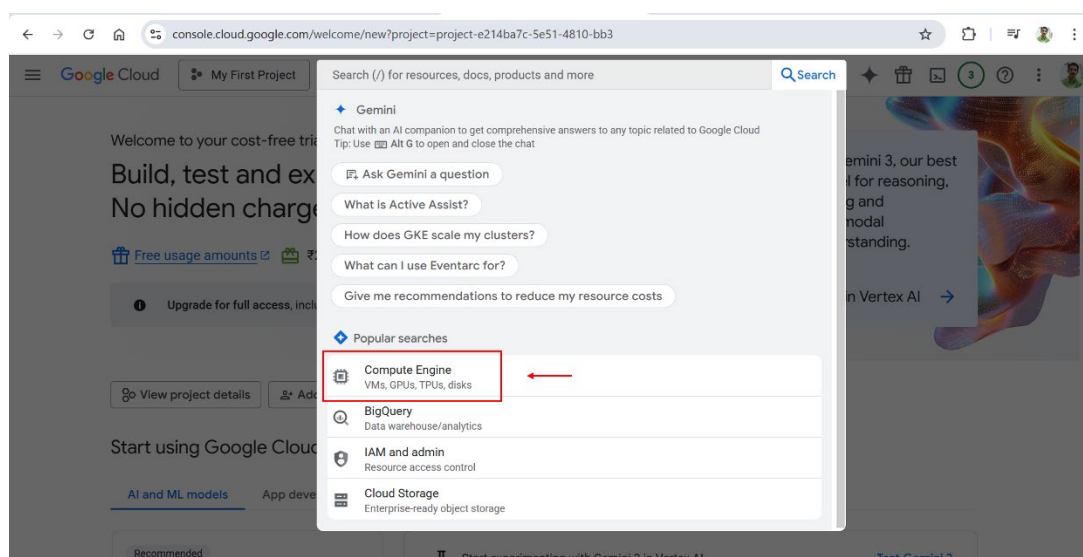
Experiment – 1:

Creating a Virtual Machine: Configure and deploy a virtual machine with specific CPU and memory requirements in Google Cloud.

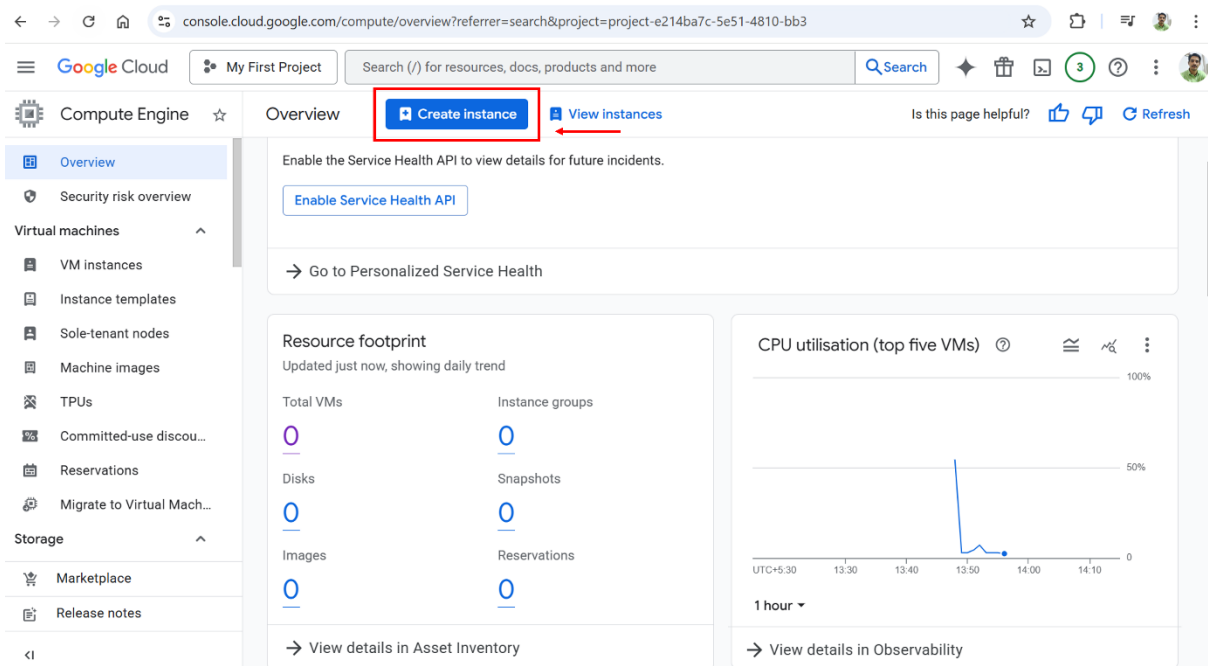
Step 1: From the Google Cloud homepage, click on **Console** to open the Google Cloud Console.



Step 2: In the welcome/search screen, select **Compute Engine** to access virtual machine services.

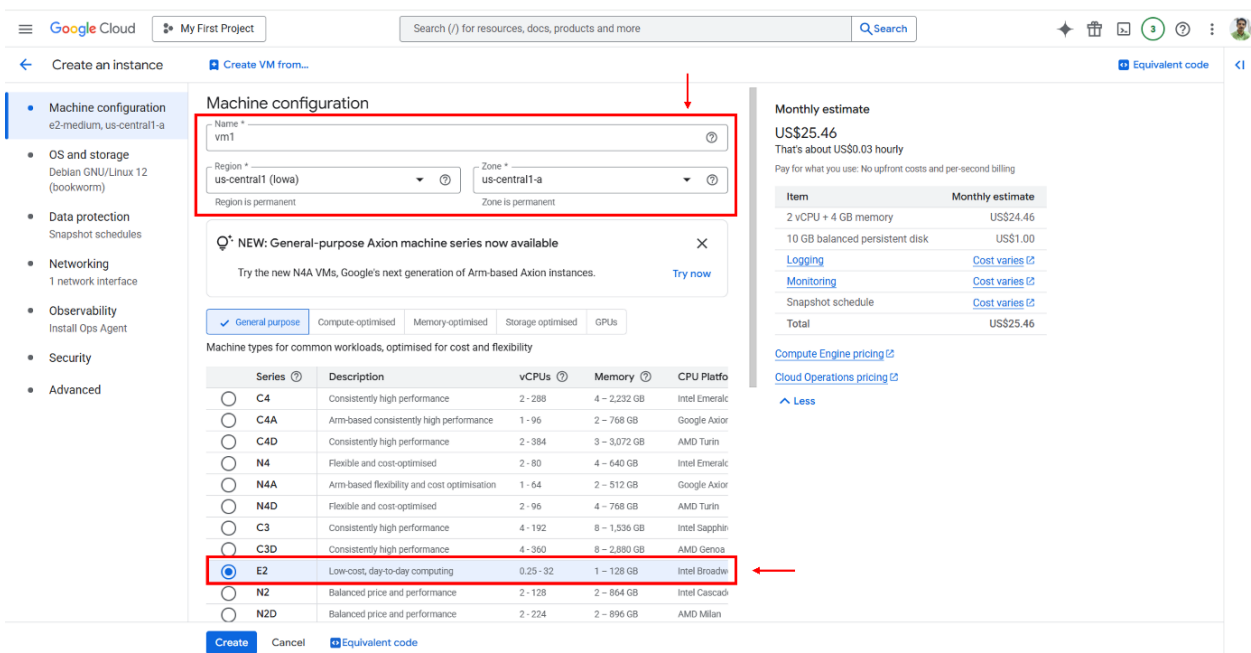


Step 3: On the Compute Engine overview page, click **Create instance** to begin virtual machine creation.



Step 4: In the machine configuration section, enter the required VM name, region, and zone.

- While selecting the machine series, keep the default **E2** series unchanged unless a different series is required.




- In the machine type section, use the **default e2-medium (2 vCPU, 4 GB RAM)** unless CPU or memory specifications need modification.

Machine type
Choose a machine type with preset amounts of vCPUs and memory that suit most workloads. Or, you can create a custom machine for your workload's particular needs. [Learn more](#)

Preset Custom

e2-medium (2 vCPU, 1 core, 4 GB memory)

 **vCPU**
1-2 vCPU (1 shared core)

Memory
4 GB

✓ [Advanced configurations](#)

Provisioning model
VM provisioning model
Standard

Determines how long your VMs will run for. Choice is permanent

✓ [VM provisioning model advanced settings](#)

Create Cancel [↔ Equivalent code](#)

Step 5: After creation, the **vm1** entry in the VM instances list confirms that the virtual machine is running.

VM instances [Create instance](#) [Import VM](#) [Refresh](#) [Learn](#)


[Instances](#) [Observability](#) [Instance schedules](#)


VM instances


Filter Enter property name or value

Status	Name	Zone	Recommendations	In use by	Internal IP	External IP	Connect
<input checked="" type="checkbox"/>	vm1	us-central1-a			10.128.0.4 (nic0)	34.72.6.176 (nic0)	SSH ▼

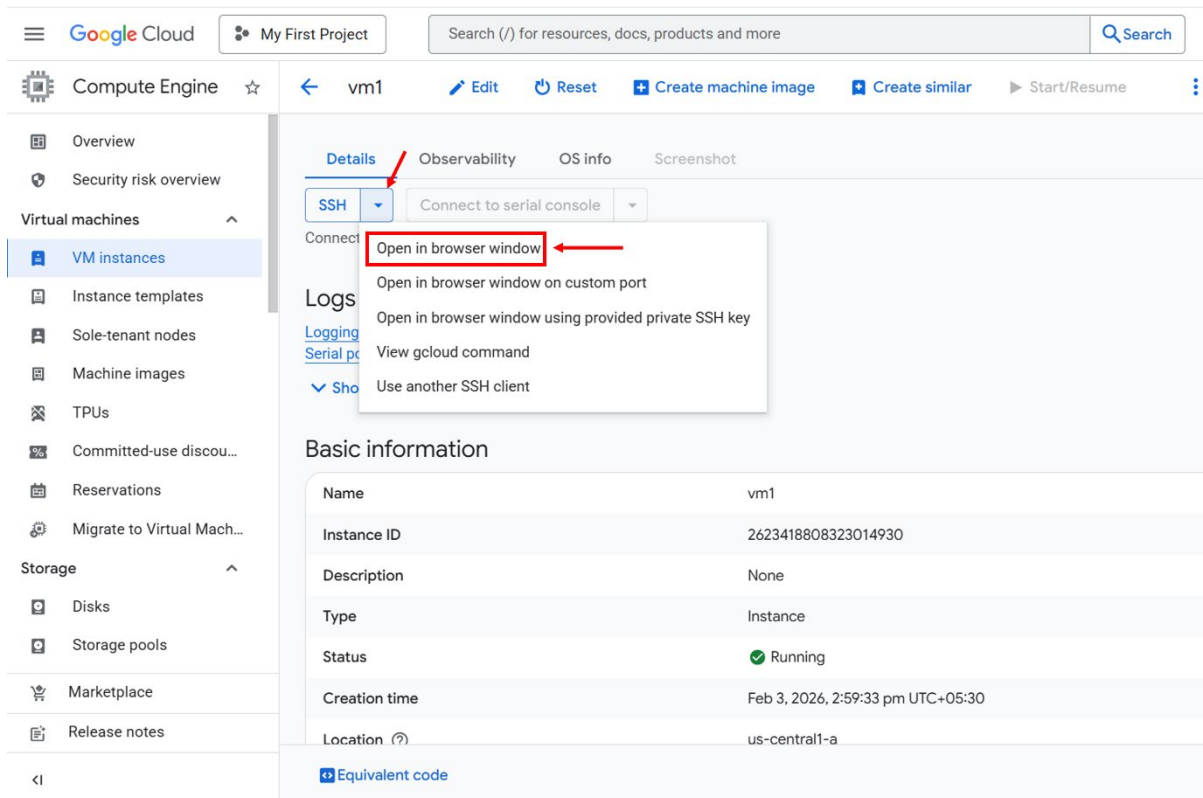
Related actions [Hide](#)

 **Protect with backup and DR**
Get centralised, immutable data protection with backup and DR service. Start your 30-day trial today

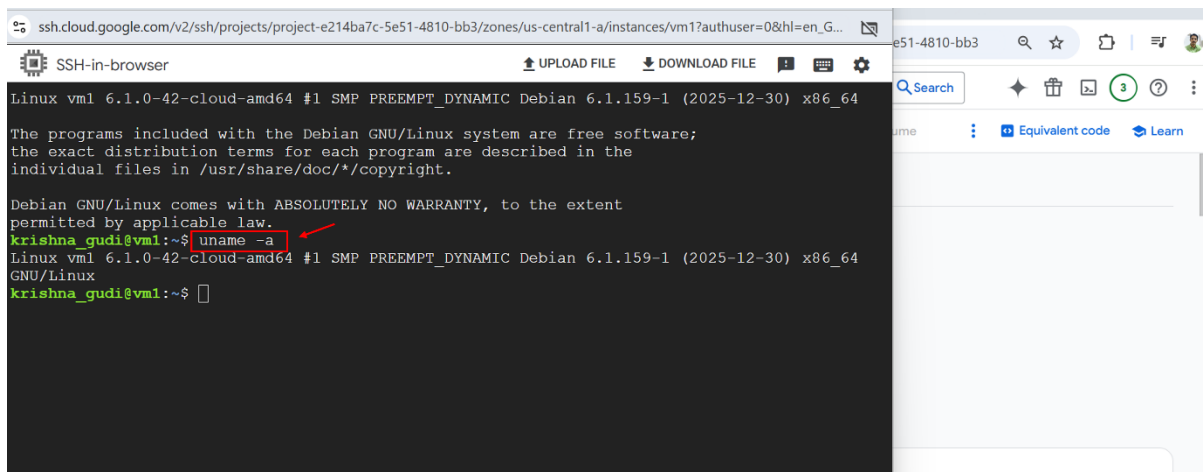
 **View billing report**
View and manage your Compute Engine billing

 **Monitor VMs**
View outlier VMs across metrics like CPU and network

Step 6: From the VM details page, click on **SSH** and select **Open in browser window** from the dropdown to connect to the virtual machine.



Step 7: In the SSH terminal, execute **uname -a**, **ls**, **pwd**, **hostname**, and **whoami** to verify the operating system and VM environment.



Step: 8: After completing the experiment, delete the virtual machine from the VM instances actions menu.

The screenshot shows the Google Cloud console interface for VM instances. The left sidebar contains navigation links for Compute Engine, Virtual machines, Instance templates, Sole-tenant nodes, Machine images, TPUs, Committed-use discounts, Reservations, Migrate to Virtual Machine, Storage, Disks, Storage pools, Marketplace, and Release notes. The main content area is titled 'VM instances' and includes tabs for 'Instances', 'Observability', and 'Instance schedules'. A table lists VM instances with columns for Status, Name, Zone, Recommendations, In use by, Internal IP, and External IP. A context menu is open for the instance 'vm1', showing various actions. The 'Delete' action is highlighted with a red box and a red arrow pointing to it.

Status	Name	Zone	Recommendations	In use by	Internal IP	External IP
Running	vm1	us-central1-a			10.128.0.4 (nic0)	34.101.101.101 (nic0)

Related actions:

- Protect with backup and DR: Get centralised, immutable data protection with backup and DR service. Start your 30-day trial today
- View billing report: View and manage your Compute Engine billing
- Monitor VMs: View outlier VMs across metrics like CPU and network
- Explore VM logs: View, search, analyse and download VM instance logs
- Set up firewall rules: Control traffic to and from a VM instance
- Patch management: Schedule patch updates and view patch compliance on VM instances
- Load balance between VMs

Context menu actions:

- Start/Resume
- Stop
- Suspend
- Reset
- Configure data protection
- Run maintenance
- Create a group based on this VM
- Create new machine image
- View logs
- View monitoring
- View network details
- Delete**
