What is cloud computing?

Delivery of computing services like servers, storages, databases, networking, software and more, over the cloud(internet).

Benefits of cloud computing

* **Cost**: It reduces the huge capital costs of buying hardware and software
* **Speed:** Resources can be accessed in minutes, typically within a few clicks.
* **Scalability:** We can increase or decrease the resources according to our business requirements.
* **Reliability:** Backup and recovery of data are less expensive and very fast for business continuity.
* **Security:** Many cloud vendors offer a broad set of policies, technologies and controls that strengthen our data security.

**Types of Cloud Computing:**

* **Public Cloud:** the cloud resources that owned and operated by a third party cloud service provider are termed as public cloud.

**Ex:** Servers, Software and storage over the internet.

* **Private Cloud:** The cloud computing resources that are exclusively used inside a single business or organization are termed as private cloud

**Ex:** Physically located on company’s on-site datacentre or hosted by a third-party service provider.

* **Hybrid Cloud:** it is combination of public and private clouds, which is bounded together by technology that allows data applications to be shared between them.

**Ex:** more flexibility and more deployment options to the business.

What is virtualization?

Logically dividing big machine into multiple virtual machines so that each virtual machine acts as new server and we can deploy any kind of applications in it. For this first we install any virtualization software on top of base OS. This virtualization software will divide base machine resources in to logical components. In a simple terms, logically dividing one machine into multiple machines we call virtualization.