**🎬 Story: “The Restaurant vs Home Kitchen”**

Imagine you and your friends want to host a big party.

* **On-Premise (Home Kitchen):**  
  You buy all the utensils, gas, fridge, ingredients, and hire a cook.  
  Huge **upfront cost**, lots of **time to prepare**, and if only 5 people show up, most of the food (and money) is wasted.  
  But if suddenly 100 people arrive, you can’t cook enough — you’re stuck!
* **Cloud (Restaurant):**  
  Instead, you book a restaurant.  
  You don’t worry about gas, utensils, or staff — it’s all ready.  
  You only **pay for the food you order**, and if more friends come, the restaurant instantly serves more.  
  If fewer come, you pay less.  
  Fast, scalable, and no headache.

**Cloud computing = Restaurant (ready, scalable, pay-as-you-go).**  
**On-Premise = Home kitchen (buy, maintain, fixed capacity).**

Q1. What is AWS?

AWS (Amazon Web Services) is a cloud computing platform that provides on-demand services like computing, storage, databases, and networking.

It helps individuals and businesses build, deploy, and scale applications without managing physical servers.

Q2. Why learn AWS?

* Industry Demand → AWS is the leading cloud provider, most companies use it.
* Career Growth → High-paying jobs (Cloud Engineer, DevOps, Architect).
* Real-World Use → Host apps, store data, ML/AI, DevOps, networking.
* Scalable & Cost-Effective → Pay-as-you-go, no heavy hardware.
* Personal Growth → Deploy your own projects & learn real infrastructure.

Q3. How AWS works?

AWS works by giving you ready-made IT resources over the internet, so you can build and scale fast without owning servers.

Q4. Where do we use AWS?

Where AWS is used:

* Websites & Apps → Host e-commerce, blogs, portfolios.
* Databases → Store customer, sales, or product data.
* Big Data & Analytics → Process large datasets (like Netflix recommendations).
* Machine Learning & AI → Train and deploy ML models.
* DevOps & CI/CD → Automate deployments and scaling.
* Backup & Storage → Secure, cheap storage (S3, Glacier).
* Gaming & Streaming → Low-latency global gaming, video streaming.

Q5. What is deVops?

**DevOps** is a **culture and practice** that combines **Development (Dev)** and **Operations (Ops)** to speed up software delivery.  
It focuses on **automation, collaboration, and continuous integration/deployment (CI/CD)** for faster and more reliable releases.

Q6. Why DevOps?

* To deliver software **faster, reliable, and with fewer errors**.
* Breaks silos between developers & operations teams.

Q7How DevOps?

* Using **automation tools** (Jenkins, Docker, Kubernetes, Ansible).
* Practices like **CI/CD, monitoring, infrastructure as code**.

Q7 Where DevOps?

* **Software companies** (for quick feature releases).
* **Startups** (to scale fast).
* **Enterprises** (for efficiency in large systems).

In short: **DevOps = Faster delivery + Automation + Anywhere software is built & deployed.**

**Some question**

Q1. What is the main difference between on-premise and cloud?

Ans. On-premise means the company owns and manages servers in-house.

While in the cloud, resources are provided and managed by third-party providers on demand like AWS, Azure, GCP.

Q2. Which is more cost-effective?

Ans. Cloud is usually more cost-effective due to pay-as-you-go.

While in on-premises requires a heavy upfront investment.

Q3. Why do some companies still use on-premise?

Ans. For data-sensitive industries (Banks, Defence, Healthcare) where regulation demand full control over data and security.

Q4. Can on-premise and cloud work together?

Ans. Yes, that’s called hybrid cloud. Companies keep critical workloads on-premises and use the Cloud for scalability and flexibility.

Cloud computing as a concept was first proposed by John McCarthy in the 1960’s but the modern cloud era began in 2006 when Amazon Web Services launched EC2, offering on-demand Computing power widely accessible

McCarty 🡪 Idea 🡪1980’s

Salesforce 🡪SaaS 🡪 1999’s

Amazon 🡪Practical Cloud 🡪2006’s