My Understanding of Cloud Computing

Cloud computing is when data, software, and services are stored and accessed over the internet instead of using a computer or server at your location. It helps people and businesses do things faster, safer, and with less equipment.

Cloud vs On-Premises

- **On-Premises** means the company keeps its own servers in its building.
- In **cloud computing**, data is stored in big data centers far away and accessed online.
- Cloud is more flexible, while on-premises gives more control.

Scalability

Cloud computing can easily **grow or shrink** depending on what you need.

- Space can be added with ease.
- Space and cost can also be lowered with ease.
- This is harder with on-premises because you must buy new hardware.

Server Storage

In the cloud, your data is saved on **many servers** around the world.
This helps with:

- **Speed**
- **Backup**
- **Saving space** on your own computer

Data Security

Cloud companies use strong security like:

- Password protection
- Encryption
- Firewalls and monitoring

But companies must still protect their own access.

Data Loss

Cloud systems usually have **backups** to prevent losing data.
But there is still risk if:

- Accounts are hacked
- People delete data by mistake
- There are internet outages

Maintenance

With cloud computing, **maintenance is handled by the provider**, not the user.
This means:

- Less work for your IT team
- Updates and repairs are done automatically
- More time to focus on other things
- **Conclusion**
  In conclusion , cloud computing helps store, protect, and use data more easily than on-premises systems. It offers scalability, strong storage, security, and easy maintenance—but users must still be careful to avoid data loss.