CS4205 – Cloud Computing

INTRODUCTION
Cloud Computing

- Cloud Computing provides us a means by which we can access the applications as utilities, over the Internet.
- It allows us to create, configure, and customize applications online.
- With Cloud Computing users can access database resources via the internet from anywhere for as long as they need without worrying about any maintenance or management of actual resources.

Introduction ….contd.

What is Cloud?

- The term Cloud refers to a Network or Internet. In other words, we can say that Cloud is something, which is present at remote location.
- Cloud can provide services over network, i.e., on public networks or on private networks, i.e., WAN, LAN or VPN. Applications such as e-mail, web conferencing, customer relationship management (CRM), all run in cloud.

Introduction ….contd.

What is Cloud Computing?

- Cloud Computing refers to manipulating, configuring, and accessing the applications online. It offers online data storage, infrastructure and application.
- Cloud Computing is both a combination of software and hardware based computing resources delivered as a network service.

Introduction ….contd.

What is Cloud Computing?

Cloud Computing can be defined as delivering computing power (CPU, RAM, Network Speeds, Storage OS software) a service over a network (usually on the internet) rather than physically having the computing resources at the customer location.

Example: AWS, Azure, Google Cloud

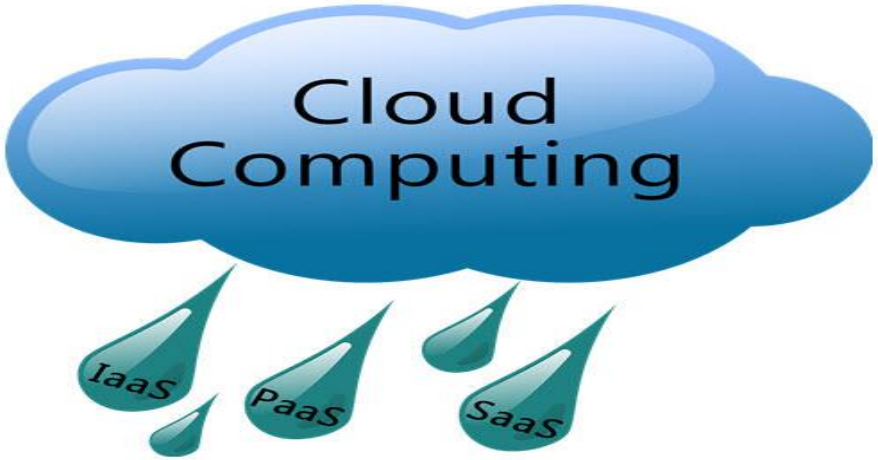
Introduction ….contd.

Why Cloud Computing?

- With the increase in computer and Mobile user's, data storage has become a priority in all fields. Large and small scale businesses today are desirous of their data & they spent a huge amount of money to maintain this data.
- It requires a strong IT support and a storage hub. Not all businesses can afford high cost of in-house IT infrastructure and back up support services. For them Cloud Computing is a cheaper solution.

Cloud Computing Architecture

Cloud Computing Architecture



Introduction ….contd.

Basic Concepts

- There are certain services and models working behind the scene making the cloud computing feasible and accessible to end users.
- Following are the working models for cloud computing: 1. Deployment Models

  2. Service Models

Introduction ….contd.

Deployment Models

Deployment models define the type of access to the cloud, i.e., how the cloud is located? Cloud can have any of the four types of access: Public, Private, Hybrid and Community.

Introduction ….contd.

Service Models

Service Models are the reference models on which the Cloud Computing is based. These can be categorized into three basic service models as listed below: