Cloud Computing Assignment

# Module -1 (Fundamentals)

1. What is cloud computing?

It is the on-demand delivery of the computer resources such as power, storage, database, application and others. It is conducted through the cloud service platform over the internet with PAYG model.

1. Describe cloud computing deploy model

There are 4 types of deployment model for cloud computing:

1. Public Cloud - CLoud available for the public to use. Eg: AWS, GCP and Azure
2. Private Cloud - It is managed internally by an organization or an individual. Eg: Enterprise CLoud
3. Community Cloud - It is used by a group of people who share the same objective.
4. Hybrid Cloud - It is a combination of public and private cloud where certain functionalities are available publicly and others privately.

3. Describe different type of cloud service

There 4 types of services:

1. Saas - In this type all 9 services are provided by cloud providers. I.e. Data, Software, Runtime, Middlewave, OS, Virtualization, Storage, Server and Network
2. Paas - In this all services except data and storage are provided
3. Iaas - Only infrastructure is provided to the client i.e. os, virtualization, storage, server and network.
4. On-premises - All the services are created and managed by client on-premises of the organization.

4. Describe cloud computing Architecture

1. Compute
2. Container
3. Storage
4. Database
5. Security, Identity and Compliance
6. Cryptography and PKI
7. Management and governance
8. Developer tools
9. Migration and transfer
10. Networking and content delivery
11. Application Integration
12. Billing and cost management
13. Monitoring
14. AWS management and console

5. What are components of cloud computing?

There are 9 components of cloud computing:

Data;

Software;

Runtime;

Middleware;

OS;

Virtualization;

Storage;

Server;

Network

6. cloud computing advantage and disadvantage

Some advantages are as follows:

* Applications as utilities over internet
* Manipulate and configure apps online
* No software required
* Online development and deployment tools
* Resources available on network
* On-demand self service\
* Cost effective
* High efficiency, reliability and flexibility

Some disadvantages are:

* Security and privacy
* Lock-in to a particular CSP
* Isolation Failure
* Management Interface Compromise
* Insecure or complete data deletion