Moiz Zubair – Bytewise Fellowship – Cloud Computing track – 1st Sept

Task 2: Cloud vs On-Premises

On-premises data center

Private data centers that businesses house and manage on-site are referred to as on-premises. Private clouds, which virtualize computational resources in a way like that of public clouds, can be operated using on-premises equipment (however, private clouds can also be run on leased third-party hardware).

On-Premises	
Advantages	**Drawbacks**
Total cost of ownership (TCO) – As you're the sole owner of the data center so a lower TCO	Expense – Requires large upfront cost as you need to purchase everything beforehand to use the resources
Complete control – You can play with the configuration as you are the owner of the whole datacenter	Maintenance – You are responsible for the maintenance and upgradation of the resources
Uptime – No internet connectivity or external software required to access datacenter	implementation times – takes longer due to the time needed to complete installations on servers and each individual computer/laptop.

Cloud computing

The "conventional" or "public" cloud refers to a third-party service provider that makes computing resources accessible. The public cloud is a multi-tenant environment, which means that multiple people or businesses share these computer resources while enjoying other benefits such as high availability, security and scalability.

Cloud Computing	
Advantages	**Drawbacks**
Access – Anywhere & anytime	Connectivity – Requires broad band connection for usage
Maintenance – maintenance free deployment and usage of resources	Long-term costs - cloud applications can be more costly over the course of the system's life cycle, increasing total cost of ownership (TCO)
Security – best practices of security implemented	Less customizable – not much offered to play with the configuration of the environment
Deployment – easy and quick deployment	
Scalability – Easy scaled as required	
Affordable – pay for only the services you use	