**Microservices Assignment 1**

**1) What is microservices?**

Microservices is an architectural style that structures an application as a collection of services that are

* Highly maintainable and testable
* Loosely coupled
* Independently deployable
* Organized around business capabilities
* Owned by a small team

**2) Challenges with monolithic oriented architecture**

1. All services in a monolithic application share data storage
2. Utilize a single technology stack
3. Very slow deployment speeds
4. Tightly coupled with low cohesion
5. Requires recreating and redeploying the entire application

**3) Any three advantage and disadvantage of microservices**

Advantages

1. Loosely coupled with high cohesion
2. Each service can be built and deployed independently
3. Can utilize a different technology stack per service

Disadvantages

1. Difficult to manage a large number of services.
2. Complex testing over a distributed environment.
3. There is a higher chance of failure during communication between different services.