**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.

1. **Challenges with monolithic oriented architecture**

* You have to redeploy the entire application on each update. Thus, Continuous deployment is difficult.
* Application is too large and complex to fully understand and made changes fast and correctly.
* It is difficult to scale when different modules have conflicting resource requirements.
* All instances of the application are identical, that single bug will impact the availability of the entire application.
* Changes in frameworks or languages will affect an entire application. Thus, it is extremely expensive in both time and cost.

1. **Any three advantage and disadvantage of microservices**

* Microservices are independently manageable services. Thus, it can enable more and more services as the need arises. It minimizes the impact on existing service.
* It is possible to change or upgrade each service individually rather than upgrading in the entire application.
* The demanding service can be deployed on multiple servers to enhance performance.