

Exercise Sheet 8: Serverless Computing

Questions and Answers

1. Introduction to Serverless: Define serverless computing and its benefits.

Answer: Serverless computing allows developers to run code without managing servers. Benefits include reduced operational overhead, automatic scaling, and pay-per-use pricing.

2. Function-as-a-Service (FaaS): Explain how FaaS works with an example.

Answer: FaaS lets developers execute code in response to events without provisioning servers. Example: AWS Lambda executes code in response to triggers like S3 events or HTTP requests.

3. Serverless Use Cases: Identify common use cases for serverless architectures.

Answer: Use cases include event-driven applications, real-time data processing, microservices, and APIs. Serverless is also ideal for tasks with unpredictable or variable workloads.