Exercise Sheet 2: Cloud Service Providers

Questions and Answers

1. Major Providers: List and describe the services of AWS, Azure, and Google Cloud.

Answer:

- AWS: Provides a wide range of services including computing power (EC2), storage (S3), databases (RDS), and machine learning (SageMaker).
- Azure: Offers services such as virtual machines, SQL databases, and AI and machine learning through Azure Cognitive Services.
- Google Cloud: Provides services like Compute Engine, Cloud Storage, and BigQuery for data analytics.

2. Comparative Analysis: Compare pricing models of AWS, Azure, and Google Cloud.

Answer: AWS, Azure, and Google Cloud have similar pricing models, typically based on pay-as-you-go and reserved instances. AWS uses a pay-per-second model for EC2, Azure offers pay-per-minute, and Google Cloud provides sustained use discounts for long-term usage.

3. Case Study: Analyze a case where a company migrated to the cloud and the benefits they gained.

Answer: Netflix migrated to AWS to improve its scalability and reliability. Benefits included reduced downtime, the ability to scale resources on-demand, and enhanced performance through a globally distributed infrastructure.