1. **Assertion (A):** AllSaints migrated its infrastructure to Google Cloud Platform to improve scalability.
   Reason (R): Google Cloud Platform offers auto-scaling through Google Kubernetes Engine.
   a. **A) Both A and R are true, and R is the correct explanation of A.**
   b. **B) Both A and R are true, but R is not the correct explanation of A.**
   c. **C) A is true, but R is false.**
   d. **D) A is false, but R is true.**
   e. **Answer:** A)

2. **Assertion (A):** AllSaints' migration to Google Cloud increased the overall operational costs.
   Reason (R): The migration eliminated redundant servers, reducing costs by 75%.
   a. **A) Both A and R are true, and R is the correct explanation of A.**
   b. **B) Both A and R are true, but R is not the correct explanation of A.**
   c. **C) A is true, but R is false.**
   d. **D) A is false, but R is true.**
   e. **Answer:** D)

3. **Assertion (A):** Pythian helped AllSaints with cloud migration.
   Reason (R): Pythian was chosen because they had no prior experience with AllSaints.
   a. **A) Both A and R are true, and R is the correct explanation of A.**
   b. **B) Both A and R are true, but R is not the correct explanation of A.**
   c. **C) A is true, but R is false.**
   d. **D) A is false, but R is true.**
   e. **Answer:** C)

4. **Assertion (A):** Page load speed improved by 35% after the migration.
   Reason (R): The migration involved the use of Google Compute Engine and Kubernetes Engine.
   a. **A) Both A and R are true, and R is the correct explanation of A.**
   b. **B) Both A and R are true, but R is not the correct explanation of A.**
   c. **C) A is true, but R is false.**
   d. **D) A is false, but R is true.**
   e. **Answer:** A)

5. **Assertion (A):** Jenkins was used for CI/CD automation.
   Reason (R): Jenkins is primarily a cloud monitoring tool.
   a. **A) Both A and R are true, and R is the correct explanation of A.**
   b. **B) Both A and R are true, but R is not the correct explanation of A.**
   c. **C) A is true, but R is false.**
   d. **D) A is false, but R is true.**
   e. **Answer:** C)

6. **Assertion (A):** AllSaints experienced faster deployment times after migration.
   Reason (R): The CI/CD pipeline was optimized using Jenkins and Terraform.
   a. **A) Both A and R are true, and R is the correct explanation of A.**
   b. **B) Both A and R are true, but R is not the correct explanation of A.**
   c. **C) A is true, but R is false.**
   d. **D) A is false, but R is true.**
   e. **Answer:** A)

7. **Assertion (A):** Google BigQuery was used to manage customer interactions.
   Reason (R): BigQuery is designed for data analytics and large-scale processing.
   a. **A) Both A and R are true, and R is the correct explanation of A.**
   b. **B) Both A and R are true, but R is not the correct explanation of A.**
   c. **C) A is true, but R is false.**
   d. **D) A is false, but R is true.**
   e. **Answer:** D)

8. **Assertion (A):** Pythian planned a phased migration to minimize downtime.
   Reason (R): The migration used a "big bang" approach to complete the transition quickly.
   a. **A) Both A and R are true, and R is the correct explanation of A.**
   b. **B) Both A and R are true, but R is not the correct explanation of A.**
   c. **C) A is true, but R is false.**
   d. **D) A is false, but R is true.**
   e. **Answer:** D)

9. **Assertion (A):** Google Stackdriver was used to monitor AllSaints' cloud infrastructure.
   Reason (R): Stackdriver offers monitoring and logging features for Google Cloud services.
   a. **A) Both A and R are true, and R is the correct explanation of A.**
   b. **B) Both A and R are true, but R is not the correct explanation of A.**
   c. **C) A is true, but R is false.**
   d. **D) A is false, but R is true.**
   e. **Answer:** A)

10. **Assertion (A):** The migration increased page load speeds by 50%.
    Reason (R): Faster response times were achieved through improved infrastructure.
    a. **A) Both A and R are true, and R is the correct explanation of A.**
    b. **B) Both A and R are true, but R is not the correct explanation of A.**
    c. **C) A is true, but R is false.**
    d. **D) A is false, but R is true.**
    e. **Answer:** C)
11. **Assertion (A):** Pythian was chosen for the migration because they had prior experience with AllSaints.
    Reason (R): Pythian had been serving AllSaints for two years in a support role.

- **A) Both A and R are true, and R is the correct explanation of A.**
- **B) Both A and R are true, but R is not the correct explanation of A.**
- **C) A is true, but R is false.**
- **D) A is false, but R is true.**
- **Answer:** A)

12. **Assertion (A):** The migration to Google Cloud led to a decrease in AllSaints' revenue.
    Reason (R): The migration improved online conversion rates by 20%.

- **A) Both A and R are true, and R is the correct explanation of A.**
- **B) Both A and R are true, but R is not the correct explanation of A.**
- **C) A is true, but R is false.**
- **D) A is false, but R is true.**
- **Answer:** D)

13. **Assertion (A):** The migration was planned to minimize customer disruption.
    Reason (R): The migration took more than a month to complete.
- **A) Both A and R are true, and R is the correct explanation of A.**
- **B) Both A and R are true, but R is not the correct explanation of A.**
- **C) A is true, but R is false.**
- **D) A is false, but R is true.**
- **Answer:** C)

14. **Assertion (A):** AllSaints used Jenkins for deployment automation.
    Reason (R): Jenkins supports building, testing, and deploying code efficiently.
- **A) Both A and R are true, and R is the correct explanation of A.**
- **B) Both A and R are true, but R is not the correct explanation of A.**
- **C) A is true, but R is false.**
- **D) A is false, but R is true.**
- **Answer:** A)

15. **Assertion (A):** The previous AllSaints infrastructure used more than 60 servers.
    Reason (R): Many of these servers were idle during non-peak periods.
- **A) Both A and R are true, and R is the correct explanation of A.**
- **B) Both A and R are true, but R is not the correct explanation of A.**
- **C) A is true, but R is false.**
- **D) A is false, but R is true.**
- **Answer:** A)

16. **Assertion (A):** Google Kubernetes Engine provides real-time analytics.
    Reason (R): Google Kubernetes Engine enables auto-scaling and container orchestration.
- **A) Both A and R are true, and R is the correct explanation of A.**
- **B) Both A and R are true, but R is not the correct explanation of A.**
- **C) A is true, but R is false.**
- **D) A is false, but R is true.**
- **Answer:** D)

17. **Assertion (A):** AllSaints saw a reduction in platform operating costs after migration.
    Reason (R): The cloud migration eliminated redundant and idle servers.

- **A) Both A and R are true, and R is the correct explanation of A.**
- **B) Both A and R are true, but R is not the correct explanation of A.**
- **C) A is true, but R is false.**
- **D) A is false, but R is true.**
- **Answer:** A)

18. **Assertion (A):** AllSaints used HashiCorp Terraform for infrastructure automation.
    Reason (R): Terraform automates the management of cloud infrastructure.
- **A) Both A and R are true, and R is the correct explanation of A.**
- **B) Both A and R are true, but R is not the correct explanation of A.**
- **C) A is true, but R is false.**
- **D) A is false, but R is true.**
- **Answer:** A)

19. **Assertion (A):** PMM (Percona Monitoring and Management) enabled efficient system monitoring.
    Reason (R): PMM provides performance analysis and alerting features.
- **A) Both A and R are true, and R is the correct explanation of A.**
- **B) Both A and R are true, but R is not the correct explanation of A.**
- **C) A is true, but R is false.**
- **D) A is false, but R is true.**
- **Answer:** A)

20. **Assertion (A):** AllSaints achieved zero downtime during migration.
    Reason (R): The migration followed a well-planned "big bang" approach.
- **A) Both A and R are true, and R is the correct explanation of A.**
- **B) Both A and R are true, but R is not the correct explanation of A.**
- **C) A is true, but R is false.**
- **D) A is false, but R is true.**
- **Answer:** B)
- **Assertion (A):** The use of Google BigQuery helped AllSaints manage massive amounts of data efficiently.
  Reason (R): Google BigQuery is designed for scalable data analysis and processing.
- **A) Both A and R are true, and R is the correct explanation of A.**
- **B) Both A and R are true, but R is not the correct explanation of A.**

- **C) A is true, but R is false.**
- **D) A is false, but R is true.**
- **Answer:** A)

22. **Assertion (A):** Pythian recommended using Google Cloud Memorystore for caching.
    Reason (R): Memorystore provides managed Redis and Memcached services.
- **A) Both A and R are true, and R is the correct explanation of A.**
- **B) Both A and R are true, but R is not the correct explanation of A.**
- **C) A is true, but R is false.**
- **D) A is false, but R is true.**
- **Answer:** A)

23. **Assertion (A):** AllSaints experienced slower response times after migration.
    Reason (R): The new cloud infrastructure introduced significant latency.
- **A) Both A and R are true, and R is the correct explanation of A.**
- **B) Both A and R are true, but R is not the correct explanation of A.**
- **C) A is true, but R is false.**
- **D) A is false, but R is true.**
- **Answer:** D)

24. **Assertion (A):** Jenkins and Terraform improved deployment times from over 20 minutes to less than 5 minutes.
    Reason (R): CI/CD pipelines help automate build and deployment processes.
- **A) Both A and R are true, and R is the correct explanation of A.**
- **B) Both A and R are true, but R is not the correct explanation of A.**
- **C) A is true, but R is false.**
- **D) A is false, but R is true.**
- **Answer:** A)

25. **Assertion (A):** The migration process was carried out gradually over several months.
    Reason (R): The "big bang" approach allowed for a quick and seamless migration.
- **A) Both A and R are true, and R is the correct explanation of A.**
- **B) Both A and R are true, but R is not the correct explanation of A.**
- **C) A is true, but R is false.**

- **D) A is false, but R is true.**
- **Answer:** D)

26. **Assertion (A):** AllSaints' platform operating costs increased after migration to the cloud.
    Reason (R): The cloud migration eliminated redundant servers, reducing costs by 75%.
- **A) Both A and R are true, and R is the correct explanation of A.**
- **B) Both A and R are true, but R is not the correct explanation of A.**
- **C) A is true, but R is false.**
- **D) A is false, but R is true.**
- **Answer:** D)

27. **Assertion (A):** Pythian's expertise helped ensure zero downtime during the migration.
    Reason (R): The use of Google Kubernetes Engine enabled continuous availability.
- **A) Both A and R are true, and R is the correct explanation of A.**
- **B) Both A and R are true, but R is not the correct explanation of A.**
- **C) A is true, but R is false.**
- **D) A is false, but R is true.**
- **Answer:** A)

28. **Assertion (A):** After migration, AllSaints experienced no improvement in user experience.
    Reason (R): Page load speed increased by 35% after the migration.
- **A) Both A and R are true, and R is the correct explanation of A.**
- **B) Both A and R are true, but R is not the correct explanation of A.**
- **C) A is true, but R is false.**
- **D) A is false, but R is true.**
- **Answer:** D)

29. **Assertion (A):** Using Jenkins and Terraform, AllSaints automated its CI/CD pipeline.
    Reason (R): Automating the CI/CD pipeline helped reduce manual errors and sped up deployments.
- **A) Both A and R are true, and R is the correct explanation of A.**

- **B) Both A and R are true, but R is not the correct explanation of A.**
- **C) A is true, but R is false.**
- **D) A is false, but R is true.**
- **Answer:** A)

30. **Assertion (A):** Google Compute Engine enhanced performance and availability.
    Reason (R): Compute Engine provides scalable and reliable virtual machines.
- **A) Both A and R are true, and R is the correct explanation of A.**
- **B) Both A and R are true, but R is not the correct explanation of A.**
- **C) A is true, but R is false.**
- **D) A is false, but R is true.**
- **Answer:** A)