INFO-6001

Lab Assignment #1



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1. Question 1.

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| Rating | Confidentiality | Integrity | Availability |
| Low | 1. Protect database with user, roles, password profiles 2. Data masking. | 1. Install updates and patches. 2. Validate user inputs and use most suitable data types | 1. Automatic data replication to passive node in HA site. 2. Sessions and connections management. |
| Moderate | 1. Symmetric and asymmetric encryption. 2. Configure firewalls and secure network for database. | 1. DML/DDL auditing and keep an audit trail. 2. Monitoring database logs. | 1. DB server performance monitoring. 2. Regularly update and install patches. |
| High | 1. Physically secure the database server. 2. protect data with encryption at several levels such as cell level, column level, table space level, file level. | 1. Scan for vulnerabilities to prevent SQL injection attacks. (SQLmap, SQLninja) | 1. Configure DR environment with high availability. 2. Ensure continuous power supply with UPS. |

1. Question 2.

