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| **Assignment Case** |  |
| COMP6119 | COMP6580  Database Administration |
| **Computer Science** | **E203-COMP6580-LF02-01** |
| ***Valid on*** *Even Semester Year 2019/2020* | **Revision 00** |

## Soal

*Case*

**IXXCinema**

**IXXCinema** is a famous cinema in Jakarta. **IXXCinema** still use conventional data management using excel to maintain its data. The CEO wants to improve the data management using SQL Server Database, so you as a database administrator in **IXXCinema** are asked to do some tasks mention below:

1. **Create** a **new database** with the following detail:

|  |  |
| --- | --- |
| **Database Name** | IXXCinema\_db |
| **File Growth** | 10% |
| **Maximum File Size** | 500 MB |

1. **Create** the following **tables** into the database with the following details:

* **MsStaff**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Data Type** | **Length** | **Description** |
| StaffId | INT | - | * Primary key * Auto increment * Cannot be empty |
| StaffName | VARCHAR | 50 | * Cannot be empty * Must be **more than 5 characters** |
| StaffGender | VARCHAR | 10 | * Cannot be empty |
| StaffDOB | DATE | - | * Cannot be empty |
| StaffSalary | BIGINT | - | * Cannot be empty |

* **MsCinema**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Data Type** | **Length** | **Description** |
| CinemaId | INT | - | * Primary key * Auto increment * Cannot be empty |
| CinemaName | VARCHAR | 50 | * Cannot be empty |
| CinemaAddress | VARCHAR | 50 | * Cannot be empty |
| CinemaPhone | CHAR | 15 | * Cannot be empty |
| TotalSeat | INT | - | * Cannot be empty |

* **MsMovie**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Data Type** | **Length** | **Description** |
| MovieId | INT | - | * Primary key * Auto increment * Cannot be empty |
| MovieName | VARCHAR | 50 | * Cannot be empty |
| MovieRating | INT | - | * Cannot be empty * Must **between 1 and 10** |
| Duration | INT | - | * Cannot be empty |
| ReleaseDate | DATE | - | * Cannot be empty |

* **CinemaTransaction**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Data Type** | **Length** | **Description** |
| TransactionId | INT | - | * Primary Key * Auto increment * Cannot be empty |
| StaffId | INT | - | * References from **Staff** table * Cannot be empty |
| CinemaId | INT | - | * References from **Cinema** table * Cannot be empty |
| MovieId | INT | - | * References from **Movie** table * Cannot be empty |
| TransactionDate | DATE | - | * Cannot be empty |

1. **Transfer data** from file ‘**data\_IXXCinema.xls**’ that is provided by the company to the created database.
2. **Create a login** and **user** for the server with the following detail:
   * **Login**
   * **SystemAdmin**

|  |  |
| --- | --- |
| **Name** | SystemAdmin |
| **Password** | Admin (**don’t forget to disable Enforce Password Policy**) |
| **Default Database** | IXXCinema\_db |
| **Server Role** | Can manage login and their properties including **Grant**, **Deny**, and **Revoke** server – level permissions |
| **Database Role** | Can modify role membership for custom roles only and manage permissions |

* **User without Login**
  + **CinemaTransactionStaff**

|  |  |
| --- | --- |
| **Name** | CinemaTransactionStaff |
| **Database Role** | 1. Can read data from Cinema Transaction 2. Can write data to Cinema Transaction |
| **DML Access** | **INSERT**, **SELECT** on Cinema Transaction table |

1. **Back Up** the database with the following detail:

|  |  |
| --- | --- |
| **Name** | IXXCinema.bak |
| **Backup Type** | FULL |
| **Expire After** | 31 days |

**How to generate script:**

1. Right click on the database
2. Tasks -> Generate Scripts
3. Choose ‘Script entire database and all database objects’, then click Next
4. Choose ‘Advanced’
   1. Script Logins = True
   2. Script Object-Level Permissions = True
   3. Types of data to script = Schema and Data
   4. OK
5. Choose ‘Save to new query window, then click Next
6. Finish

**Files to be collected:**

* [NIM].sql (generated script)
* BAK file
* MDF & LDF files

**Make sure that the generated script contains Create Database, Create User and Login, Insert into Query**

**If you have any question, feel free to ask your assistant.**