Assignment 3:

Best Way to Copy an SQL Server database “base” to database “Copied”: we can achieve this functionality by below scenarios.

* detaching and attaching database;
* comparing and synchronizing schemas and data of source and target databases;
* Restoring a backed up source database to a target database.

Each of them has its strong and weak points. To sum up, we would like to list pros and cons of each method.

**The Detach and Attach Method**

**We can perform this functionality through Wizards.**

Pros:

* The fastest way to copy a “base” database.

Cons:

* Source database should be offline;
* All connections will be lost;
* shared folder is required;
* SQL Server version on the target must be the same or higher than that on the source;

**Backup and Restore Method**

**We can perform this functionality through Wizards as well as in SQL Scripts.**

Pros:

* source database may remain online;

Cons:

* a bit slower, then the previous method;
* SQL Server version on the target must be the same or higher that on the source;
* shared folder is required;

**Schema and Data Compare& Sync Method**

**We can pick any schema under “base” database and will move into “Copied” database once compare and validation is completed. Basically it will achieve through wizards.**

Pros:

* the source database may remain online;
* does not require a shared folder;
* method does not depend on the SQL Server version;

Cons:

* time consuming method.