1. **Display all the data from the Employee table (HumanResources Schema) As an XML (Use: XML path).**  
   **(Advanture works DB)**

1. **Create an textQuestions table that contains: ID, Course , Grade(Untyped XML Column).[Bouns]**
   1. **Insert some records in the table.**
   2. **What’re the differences between Typed and untyped XML columns?**
   3. **Can you query from XML column based on a value of specific XML element or attribute? (Use XPath and XQuery) .**
2. **Create login and user for iti DB on Student table allow user to make select for St\_id, St\_Fname prevent user from Update St\_Lname.**
3. **make login and user for Company DB on Schema that Includes ( View , Stored , Function )**
4. **Return the result of this XML data as table (XML shredding):**

**<book genre="VB" publicationdate="2010">**

**<title>Writing VB Code</title>**

**<author>**

**<firstname>ITI</firstname>**

**<lastname>ITI</lastname>**

**</author>**

**<price>44.99</price>**

**</book>**

* 1. **Create a table according to the returned tabular data and insert the result on it (Search for: Create table as select statement).**

1. **Create a job that make all available types of backup Daily**

**Enrich your SQL server development skills (Self-study) [Big Bonus]:**

* What's bulk insert? Explain using and example.
* What’re the uses of Pivot and Unpivot in SQL Server?
  + You can refer to: <https://docs.microsoft.com/en-us/sql/t-sql/queries/from-using-pivot-and-unpivot?view=sql-server-ver15>
* What’s SQL server Ranking functions?
  + You can refer to: <https://docs.microsoft.com/en-us/sql/t-sql/functions/ranking-functions-transact-sql?view=sql-server-ver15>
* What’re sql server wide table and sparse column?
  + <https://docs.microsoft.com/en-us/sql/relational-databases/tables/use-sparse-columns?view=sql-server-ver15>
  + <https://docs.microsoft.com/en-us/sql/relational-databases/tables/tables?view=sql-server-ver15#wide-tables>
* What’s SQL server Full-text search?
  + <https://docs.microsoft.com/en-us/sql/relational-databases/search/full-text-search?view=sql-server-ver15>
* What’s partitioned tables?
  + <https://docs.microsoft.com/en-us/sql/relational-databases/partitions/partitioned-tables-and-indexes?view=sql-server-ver15>
* What’re the database recovery models?
  + <https://docs.microsoft.com/en-us/sql/relational-databases/backup-restore/recovery-models-sql-server?view=sql-server-ver15>
* What are SQLSCLR? Make a demo on SQLCLR functions, triggers.
* SQL server administration basics:
  + SQL server administration videos:
    - <https://drive.google.com/drive/u/0/folders/1uoi7VNHh1-oxcpIYsufB6bWlGeiwquQl>
  + Databases backup and restore
    - <https://docs.microsoft.com/en-us/sql/relational-databases/backup-restore/back-up-and-restore-of-sql-server-databases?view=sql-server-ver15>
  + What’s a database snapshot?
    - <https://docs.microsoft.com/en-us/sql/relational-databases/databases/database-snapshots-sql-server?view=sql-server-ver15>
  + Automating SQL server (Jobs and schedules)
    - <https://docs.microsoft.com/en-us/sql/ssms/agent/sql-server-agent?view=sql-server-ver15>
  + SQL server security model (Logins, users, permissions)
    - <https://docs.microsoft.com/en-us/sql/relational-databases/security/authentication-access/determining-effective-database-engine-permissions?view=sql-server-ver15>