For the submission of your work:

- Create a folder named **RollNo_Name_DBI202_PaperNo**, e.g. se01245_LongNT_DBI202_01. **Do not** create any subfolder in this folder. All file created will be located in the above folder.

- For each question, you are required to write a database script. Create a file with the name corresponding to the index of the question. For example, **for question 1**, we will create a file named **Q1.sql** and create a file **Q2.sql for question 2**. So, if you do 10 questions, your folder must contain **only** 10 files Q1.sql, Q2.sql, Q3.sql, Q4.sql, Q5.sql, Q6.sql, Q7.sql, Q8.sql, Q9.sql and Q10.sql.

- Do not use any commands having the database name such as create database, alter database, use [database name], *etc*.

- Your response must contain only necessary commands for answering the question. Do not include any other command. For example, if you are required to create a trigger/procedure, then your response should contain only commands for creating the corresponding trigger/procedure; all commands for testing the created trigger/procedure are forbidden.

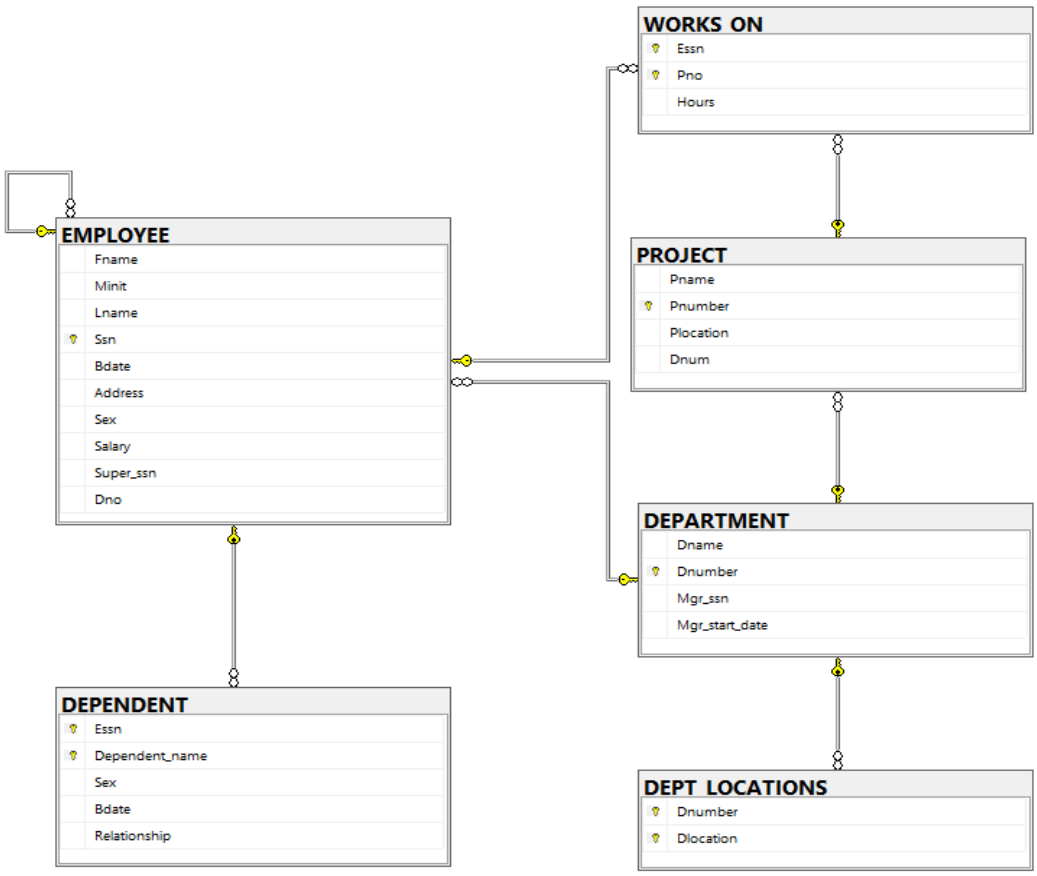
- On completion, import your work by browsing to the above folder.

- Note that:

+ You could use only SQL Server, SQL Server Management Studio, and paper or offline document in your computer.

+ If <u>any</u> of the previous requirements is not respected, your mark will be 0.

From the 2nd question, you should use the database provided in the .sql file which has the following database diagram. Please, run the provided script to create tables and insert data into your database.



Question 1:

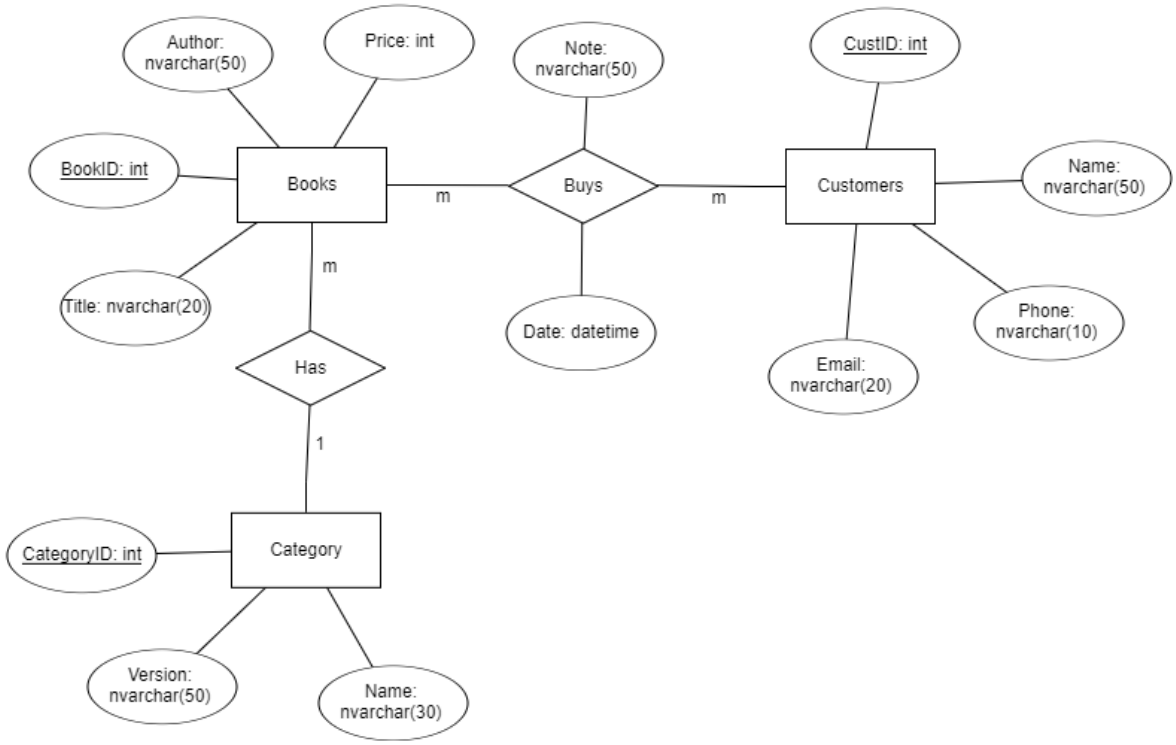
Create one database and then write SQL statements to create, in this database, all tables derived from the ERD given in the following picture with appropriate attributes, primary keys and foreign keys.

NOTE that when creating the SQL commands as request, you MUST keep the name of tables, relationship, attributes and data type of attributes as SAME as given in the given ERD.

Attributes with underline belong to the Primary Key of each entity.

Attributes which reference to the primary key of another table must have the same name as the attributes in the primary key of the referencing table.

When submitting the responses for this question, submit only SQL statements for creating tables with corresponding keys and foreign keys. Do not use “create database”, “Alter database”, “use database_name” or any statements using database’s name in your submission.



Picture 1.1

Question 2:

Write a query to show Fname, Lname, Bdate, Address, Salary of all employee which have FName is Victoria as follows.

	Fname	Lname	Bdate	Address	Salary
1	Victoria	Tiny	1952-01-12	958 Cung, Gold, TX	85000.00

Picture 2.1

Question 3:

Write a query to find the Fname, Lname, Minit and Sex of all employee with First name is Kim and whose sex is F as follows:

	Fname	Lname	Minit	Sex
1	Kim	Possible	P	F

Picture 3.1

Question 4:

Write a query to display Full_name ,Salary, Dependent_name of all employee having the Dependent_name is Beckham and Salary ranges from 50000 to 85000 as follows:

	Full_name	Salary	Dependent_name
1	Victoria, Tiny	85000.00	Beckham

Picture 4.1

Question 5:

Write a query to display First_Name, Last_Name, Birthday, Dependent_name and find the highest salary of all employee having the Last_Name is Tiny as follows:

	First_Name	Last_Name	Birthday	Dependent_name	MAX(salary)
1	Victoria	Tiny	1952-01-12	Beckham	85000.00
2	Victoria	Tiny	1952-01-12	James	85000.00
3	Victoria	Tiny	1952-01-12	Jennie	85000.00
4	Victoria	Tiny	1952-01-12	Kai	85000.00

Picture 5.1

Question 6:

Write a query to display Full_name, Bdate, Hours, and Plocation of all employee having the month is 05 as follows:

	Full_name	Bdate	Hours	Plocation
1	Mark, Can	1993-05-12	10.0	Bellaire
2	Mark, Can	1993-05-12	10.0	Sugarland
3	Mark, Can	1993-05-12	10.0	Houston

Picture 6.1

Question 7:

Write a query to find the Employee_id, First_Name, and total Number_of_Hours of all employee greater than 2. The result is ordered by Number_of_Hours.

	Employee_id	First_Name	Number_of_Hours
1	333445555	Franklin	4
2	654321789	Ahn	3
3	111222444	Mark	3
4	123678890	Bary	3

Picture 7.1

Question 8:

Create a trigger named Salary_Not_Aecrease for update event to prevent employee salary reduction.

For example, when the following statement is executed, the result will be as in the following figure:

```
UPDATE employee
SET salary = 46000
WHERE Ssn = 111222444;
SELECT Salary FROM employee
WHERE Ssn= 111222444;
```

	Salary
1	45000.00

Picture 8.1

Question 9:

Create a procedure named CountPro to count the number of Gender in a Gender “M”.

For example, when the statement below (to find the number of Gender in a Gender “M”) is executed, the result will be as in the following figure:

```
DECLARE @Gender CHAR(1) = 'M' ;
DECLARE @number INT;
EXEC CountPro @Gender, @number OUTPUT;
SELECT @Gender AS Gender, @number AS NumberOfGender;
```

	Gender	NumberOfGender
1	M	14

Picture 9.1

Question 10:

Find all dept_locations whose location number is 1 to update the location to 'Sydney'.