In the design for the Fresher Training Management, given the Trainee table with below initial attributes / fields:

* TraineeID: trainee identifier, auto increment field
* Full\_Name: full name of the trainee
* Birth\_Date: trainee birth date
* Gender: only have one of two value male, female
* ET\_IQ: entry test point (IQ) of trainee, integer, value range FROM 0 to 20
* ET\_Gmath: entry test point (GMath) of trainee, integer, value range FROM 0 to 20
* ET\_English: entry test point (English) of trainee, integer, value range FROM 0 to 50
* Training\_Class: the class code that trainee is joining
* Evaluation\_Notes: trainee evaluation notes, free text.

For the following requests, print out respectively the screenshots to show test data (the table data that you create to test each query), the query results, and pack them into the zip file Assignment2\_AccountName.zip along with your answers, then handle to the evaluator via email ([XYZ@fsoft.com.vn](mailto:XYZ@fsoft.com.vn))

**Q1**: Create the tables (with the most appropriate/economic field/column constraints & types) and add at least 10 records into each created table.

***Answer:***

CREATE TABLE Trainee

(

TraineeID int IDENTITY(1,1) primary key ,

Full\_Name nvarchar(50),

Birth\_Date datetime,

Gender bit,

ET\_IQ int,

ET\_Gmath int,

ET\_English int,

Training\_Class nvarchar(10),

Evaluation\_Notes nvarchar(100),

CONSTRAINT chk\_ETIQ CHECK (ET\_IQ >= 0 AND ET\_IQ <= 20),

CONSTRAINT chk\_ETGmath CHECK (ET\_IQ >= 0 AND ET\_IQ <= 20),

CONSTRAINT chk\_ETEnglish CHECK (ET\_IQ >= 0 AND ET\_IQ <= 50)

)

INSERT INTO Trainee(Full\_Name, Birth\_Date, Gender, ET\_IQ, ET\_Gmath, ET\_English, Training\_Class, Evaluation\_Notes) VALUES ('Mike Ambinder', '8/21/1984', 0, 15, 10, 41, 'C112', 'Lazy')

INSERT INTO Trainee(Full\_Name, Birth\_Date, Gender, ET\_IQ, ET\_Gmath, ET\_English, Training\_Class, Evaluation\_Notes) VALUES ('Jeep Barnett', '7/15/1982', 0, 17, 6, 35, 'C121', 'Excelent')

INSERT INTO Trainee(Full\_Name, Birth\_Date, Gender, ET\_IQ, ET\_Gmath, ET\_English, Training\_Class, Evaluation\_Notes) VALUES ('Kaci Aitchison', '2/21/1987', 1, 7, 15, 44, 'C142', 'Good')

INSERT INTO Trainee(Full\_Name, Birth\_Date, Gender, ET\_IQ, ET\_Gmath, ET\_English, Training\_Class, Evaluation\_Notes) VALUES ('Andrea Wendel', '7/15/1988', 1, 7, 18, 35, 'C212', 'Okay')

INSERT INTO Trainee(Full\_Name, Birth\_Date, Gender, ET\_IQ, ET\_Gmath, ET\_English, Training\_Class, Evaluation\_Notes) VALUES ('Greg Coomer', '3/21/1978', 0, 15, 17, 32, 'C152', 'Employer of the month')

INSERT INTO Trainee(Full\_Name, Birth\_Date, Gender, ET\_IQ, ET\_Gmath, ET\_English, Training\_Class, Evaluation\_Notes) VALUES ('Mike Dunkle', '1/25/1982', 0, 17, 8, 17, 'C147', 'Good')

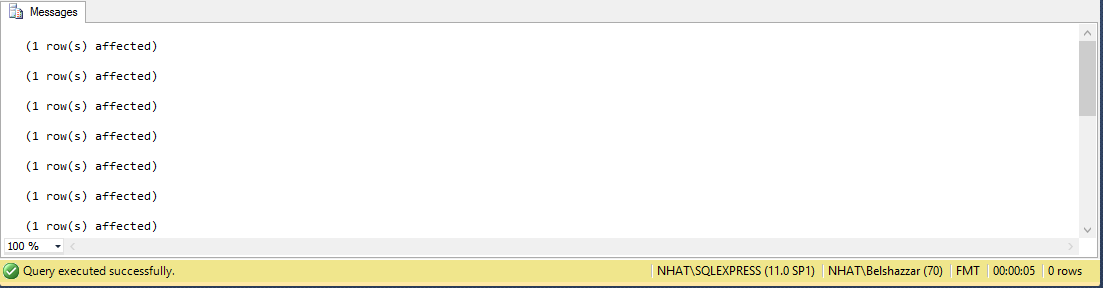
INSERT INTO Trainee(Full\_Name, Birth\_Date, Gender, ET\_IQ, ET\_Gmath, ET\_English, Training\_Class, Evaluation\_Notes) VALUES ('Emilia Clarke', '2/21/1990', 1, 13, 15, 35, 'C169', 'Okay')

INSERT INTO Trainee(Full\_Name, Birth\_Date, Gender, ET\_IQ, ET\_Gmath, ET\_English, Training\_Class, Evaluation\_Notes) VALUES ('Dave Feise', '4/15/1984', 0, 17, 18, 18, 'C192', 'Excelent')

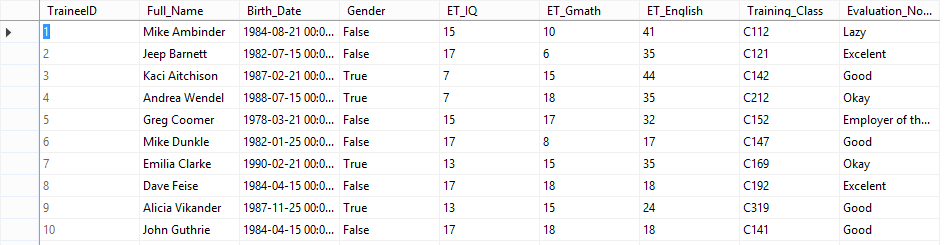
INSERT INTO Trainee(Full\_Name, Birth\_Date, Gender, ET\_IQ, ET\_Gmath, ET\_English, Training\_Class, Evaluation\_Notes) VALUES ('Alicia Vikander', '11/25/1987', 1, 13, 15, 24, 'C319', 'Good')

INSERT INTO Trainee(Full\_Name, Birth\_Date, Gender, ET\_IQ, ET\_Gmath, ET\_English, Training\_Class, Evaluation\_Notes) VALUES ('John Guthrie', '4/15/1984', 0, 17, 18, 18, 'C141', 'Good')

***Result:***



* **Test data for question 2,3,4,5**



**Q2**: Change the table TRAINEE to add one more field named Fsoft\_Account which is a not-null & unique field.

***Answer:***

ALTER TABLE dbo.Trainee

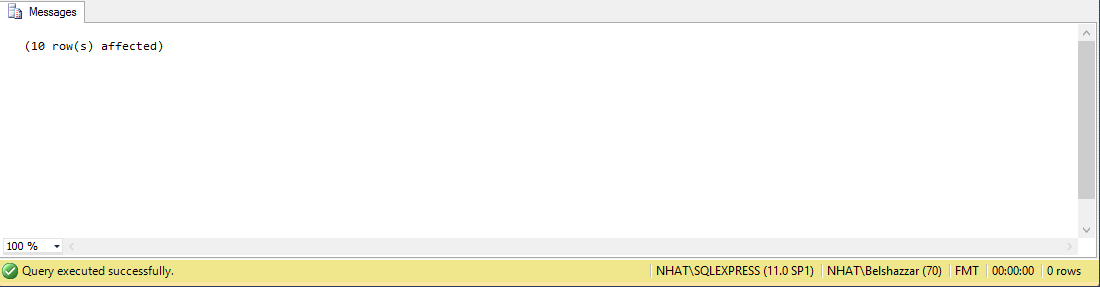
ADD Fsoft\_Account varchar(50) NOT NULL DEFAULT ('new account')

UPDATE Trainee SET [Fsoft\_Account] = [Fsoft\_Account] + CONVERT(nvarchar(10),[TraineeID])

ALTER TABLE Trainee

ADD UNIQUE (Fsoft\_Account)

***Result:***



**Q3**: Create a VIEW which includes all the ET-passed trainees. One trainee is considered as ET-passed when he/she has the entry test points satisfied below criteria:

* ET\_IQ + ET\_Gmath >=20
* ET\_IQ>=8
* ET\_Gmath>=8
* ET\_English>=18

***Answer:***

CREATE VIEW PassedTrainee AS

SELECT \*

FROM dbo.Trainee

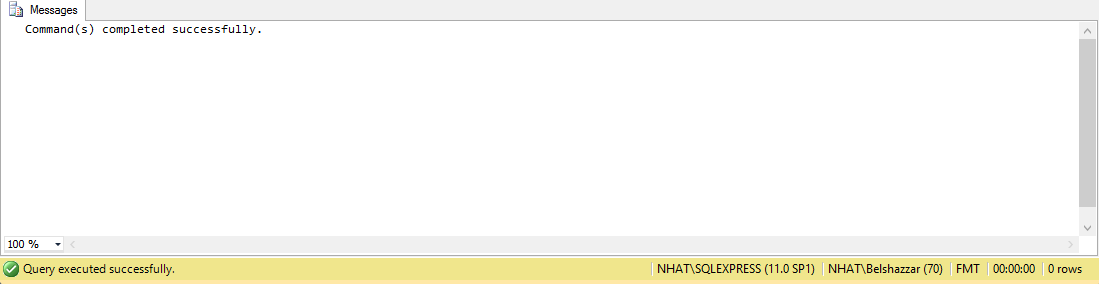
WHERE ([ET\_IQ] + [ET\_Gmath]) >= 20 AND

[ET\_IQ] >= 8 AND

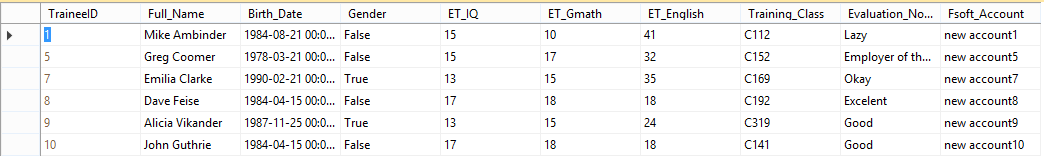
[ET\_Gmath] >=8 AND

[ET\_English] >= 18

***Result:***



View



**Q4**: Query all the trainees who is passed the entry test, group them into different birth months.

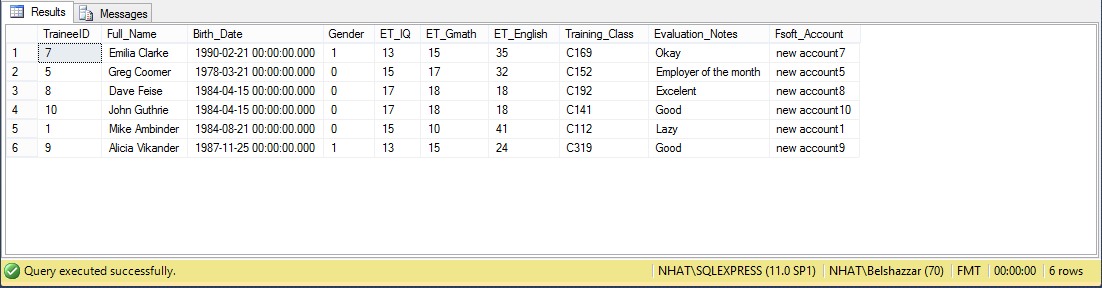
***Answer:***

SELECT \*

FROM dbo.PassedTrainee

ORDER BY Month([Birth\_Date])

***Result:***



**Q5**: Query the trainee who has the longest name, showing his/her age along with his/her basic information (as defined in the table)

***Answer:***

SELECT TOP 1 \*

FROM dbo.Trainee

ORDER BY Len([Full\_Name]) DESC

***Result:***

