Contents

[**Q1**: Create the tables (with the most appropriate/economic field/column constraints & types) and add at least 10 records into each created table. 2](#_Toc425330804)

[**Q2**: Change the table TRAINEE to add one more field named Fsoft\_Account which is a not-null & unique field. 3](#_Toc425330805)

[**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: 3](#_Toc425330806)

[**Q4**: Query all the trainees who is passed the entry test, group them into different birth months. 4](#_Toc425330807)

[**Q5**: Query the trainee who has the longest name, showing his/her age along with his/her basic information (as defined in the table) 4](#_Toc425330808)

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

|  |
| --- |
| CREATE TABLE TRAINEE(  TraineeID int IDENTITY(1,1) PRIMARY KEY,  Full\_Name nvarchar(50),  Birth\_Date date,  Gender bit not null,  ET\_IQ tinyint DEFAULT 0 CHECK (ET\_IQ >= 0 AND ET\_IQ <= 20),  ET\_GMath tinyint DEFAULT 0 CHECK (ET\_GMath >= 0 AND ET\_GMath <= 20),  ET\_English tinyint DEFAULT 0 CHECK (ET\_English >= 0 AND ET\_English <= 50),  Training\_Class varchar(30),  Evaluation\_Notes nvarchar(200)  ) |

|  |
| --- |
| SET DATEFORMAT dmy;  INSERT INTO TRAINEE(Full\_Name, Birth\_Date, Gender, ET\_IQ, ET\_GMath, ET\_English, Training\_Class, Evaluation\_Notes)  VALUES(N'Nguyễn Hải Đăng', '24/08/1994', 1, 19, 19, 49, '.NET', N'good skills')  INSERT INTO TRAINEE(Full\_Name, Birth\_Date, Gender, ET\_IQ, ET\_GMath, ET\_English, Training\_Class, Evaluation\_Notes)  VALUES(N'Lê Quang Vinh', '26/08/1993', 1, 7, 6, 23, '.NET', N'take off')  INSERT INTO TRAINEE(Full\_Name, Birth\_Date, Gender, ET\_IQ, ET\_GMath, ET\_English, Training\_Class, Evaluation\_Notes)  VALUES(N'Phạm Nam Trường', '13/04/1994', 1, 15, 16, 33, 'JAVA', N'enthusiasm')  INSERT INTO TRAINEE(Full\_Name, Birth\_Date, Gender, ET\_IQ, ET\_GMath, ET\_English, Training\_Class, Evaluation\_Notes)  VALUES(N'Hoàng Xuân Thiên', '17/05/1992', 1, 16, 15, 19, '.NET', N'submit assignment late')  INSERT INTO TRAINEE(Full\_Name, Birth\_Date, Gender, ET\_IQ, ET\_GMath, ET\_English, Training\_Class, Evaluation\_Notes)  VALUES(N'Dư Phát Tài', '21/09/1994', 1, 15, 7, 27, 'JAVA', N'have good ideas')  INSERT INTO TRAINEE(Full\_Name, Birth\_Date, Gender, ET\_IQ, ET\_GMath, ET\_English, Training\_Class, Evaluation\_Notes)  VALUES(N'Trần Cẩm Quốc', '19/02/1993', 1, 19, 13, 35, 'JAVA', N'monitor')  INSERT INTO TRAINEE(Full\_Name, Birth\_Date, Gender, ET\_IQ, ET\_GMath, ET\_English, Training\_Class, Evaluation\_Notes)  VALUES(N'Đỗ Hoàng Phương', '05/03/1994', 1, 17, 16, 38, '.NET', N'good at resolving problem')  INSERT INTO TRAINEE(Full\_Name, Birth\_Date, Gender, ET\_IQ, ET\_GMath, ET\_English, Training\_Class, Evaluation\_Notes)  VALUES(N'Lê Quang Nhật', '29/01/1992', 1, 17, 18, 40, 'JAVA', N'boss')  INSERT INTO TRAINEE(Full\_Name, Birth\_Date, Gender, ET\_IQ, ET\_GMath, ET\_English, Training\_Class, Evaluation\_Notes)  VALUES(N'Nguyễn Khoa Minh Nhân', '01/12/1993', 1, 6, 17, 17, '.NET', N'nothing')  INSERT INTO TRAINEE(Full\_Name, Birth\_Date, Gender, ET\_IQ, ET\_GMath, ET\_English, Training\_Class, Evaluation\_Notes)  VALUES(N'Nguyễn Thị Phương Mai', '10/11/1994', 0, 8, 19, 36, 'JAVA', N'only girl in the class') |

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

|  |
| --- |
| ALTER TABLE TRAINEE ADD Fsoft\_Account varchar(30)  UPDATE TRAINEE SET Fsoft\_Account = 'nguyenhaidang@gmail.com' WHERE TraineeID = 1  UPDATE TRAINEE SET Fsoft\_Account = 'lequangvinh@gmail.com' WHERE TraineeID = 2  UPDATE TRAINEE SET Fsoft\_Account = 'phamnamtruong@gmail.com' WHERE TraineeID = 3  UPDATE TRAINEE SET Fsoft\_Account = 'hoangxuanthien@gmail.com' WHERE TraineeID = 4  UPDATE TRAINEE SET Fsoft\_Account = 'duphattai@gmail.com' WHERE TraineeID = 5  UPDATE TRAINEE SET Fsoft\_Account = 'trancamquoc@gmail.com' WHERE TraineeID = 6  UPDATE TRAINEE SET Fsoft\_Account = 'dohoangphuong@gmail.com' WHERE TraineeID = 7  UPDATE TRAINEE SET Fsoft\_Account = 'lequangnhat@gmail.com' WHERE TraineeID = 8  UPDATE TRAINEE SET Fsoft\_Account = 'nguyenhkhoaminhnhan@gmail.com' WHERE TraineeID = 9  UPDATE TRAINEE SET Fsoft\_Account = 'nguyenthiphuongmai@gmail.com' WHERE TraineeID = 10  ALTER TABLE TRAINEE ALTER COLUMN Fsoft\_Account varchar(30) NOT NULL  ALTER TABLE TRAINEE ADD CONSTRAINT UNI\_Fsoft\_Account UNIQUE(Fsoft\_Account) |

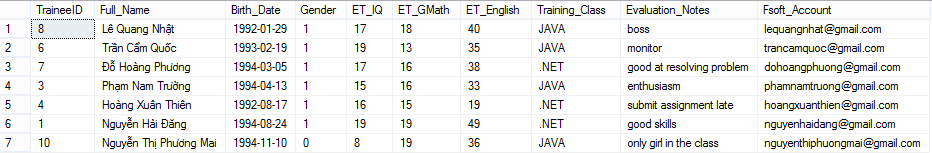
# **Q3**: Create a VIEW which includes all the ET-passed trainees. One trainee is considered as ET-passed when he/she has the entry test points satisfied below criteria:

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

|  |
| --- |
| CREATE VIEW dbo.view\_PassEntryTest  AS  SELECT TraineeID,  Full\_Name,  Birth\_Date,  Gender,  ET\_IQ,  ET\_GMath,  ET\_English,  Training\_Class,  Evaluation\_Notes,  Fsoft\_Account  FROM TRAINEE  WHERE ET\_IQ + ET\_GMath >= 20  AND ET\_IQ >= 8  AND ET\_GMath >= 8  AND ET\_English >= 18 |

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

|  |
| --- |
| SELECT \* FROM dbo.view\_PassEntryTest  ORDER BY MONTH(Birth\_Date) |



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

|  |
| --- |
| SELECT trainee1.TraineeID,  trainee1.Full\_Name,  trainee1.Birth\_Date,  trainee1.Gender,  trainee1.ET\_IQ, ET\_GMath,  trainee1.ET\_English,  trainee1.Training\_Class,  trainee1.Evaluation\_Notes,  trainee1.Fsoft\_Account,  LEN(trainee1.Full\_Name) AS Length\_Of\_Name  FROM TRAINEE trainee1  WHERE NOT EXISTS  (  SELECT 1  FROM TRAINEE trainee2  WHERE LEN(trainee2.Full\_Name) > LEN(trainee1.Full\_Name)  ) |

C:\Users\CHRIST\Desktop\the_longest_trainee_name.png