INTRODUCTION TO DATABASES PROJECT

PHASE 2

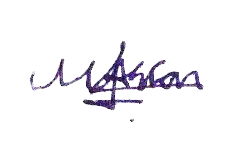


Şerefim ve inandığım tüm değerler adına yemin ederim ki bu sınavda hiçbir yerden kopya çekmedim ve etik kurallarına karşı gelmedim.

I swear on behalf of my honor and all the values I believe in that I did not cheat in this exam from anywhere and I did not violate the ethic rules.

MYM FOOTBALL FEDERATION

MERİÇ ASLAN – 138720007

 kişi, gömlek, genç, poz içeren bir resim

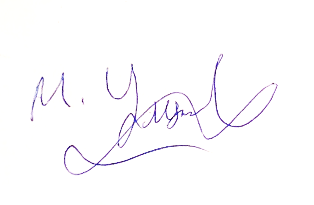
Açıklama otomatik olarak oluşturuldu

MEHMET KESTEK – 138721508

 kişi, duvar, adam, poz içeren bir resim

Açıklama otomatik olarak oluşturuldu

MUHAMMED YUSUF LALE – 138720012

 kişi, duvar, iç mekan, adam içeren bir resim

Açıklama otomatik olarak oluşturuldu ASSOC.PROF Selçuk KIRAN

FOOTBALL CLUB’S DBMS

Description Of The Project

In our database model, we would like to analyze a football team. As we explained at the “Entities” part, we take a look at the main elements of a football club such as facilities, players, pilot clubs, club employees, achievements, equipment, player’s managers, transfers and fans.

We have written our business rules sentence by sentence. Then we explained our entities. After the part of "Data Dictionary", we drew the diagram. In this way, we tried to explain the structure of a football club.

Entities:

1) Club: a football team competing in a country's football league.

2) Facilities: Areas where players prepare for competitions, where matches are played and which clubs use administratively.

3) Players: Athletes performing in a football club.

4) Pilot Club: According to the agreement between the top teams, usually the players of the lower teams, facilities, etc. benefit from.

5) Club employees: Persons who perform financial, administrative and similar duties.

6) Financial Status: The sum of a club's income and expenses.

7) Achievement: All the medals and trophies that a club receives as a result of the competition are called.

8) Sports Equipment: All inventories that players use during matches or during training.

9) Managers: These are the people who represent the football player, arrange transfer negotiations and negotiate with the necessary teams and arrange the transfer.

10) Transfers: The acquisition of a player by another club at a cost.

11) Fans: Supporters of any sports club are called.

Business Rules:

1) Clubs compete in the leagues of the country they are in.

2) Each team must have a minimum of 15 and a maximum of 28 players..

3) Every club must have a chairman of the board, security officer, stadium manager.

4) Clubs must notify the federation in which stadium they will play before the season starts.

5) Every player must have a manager.

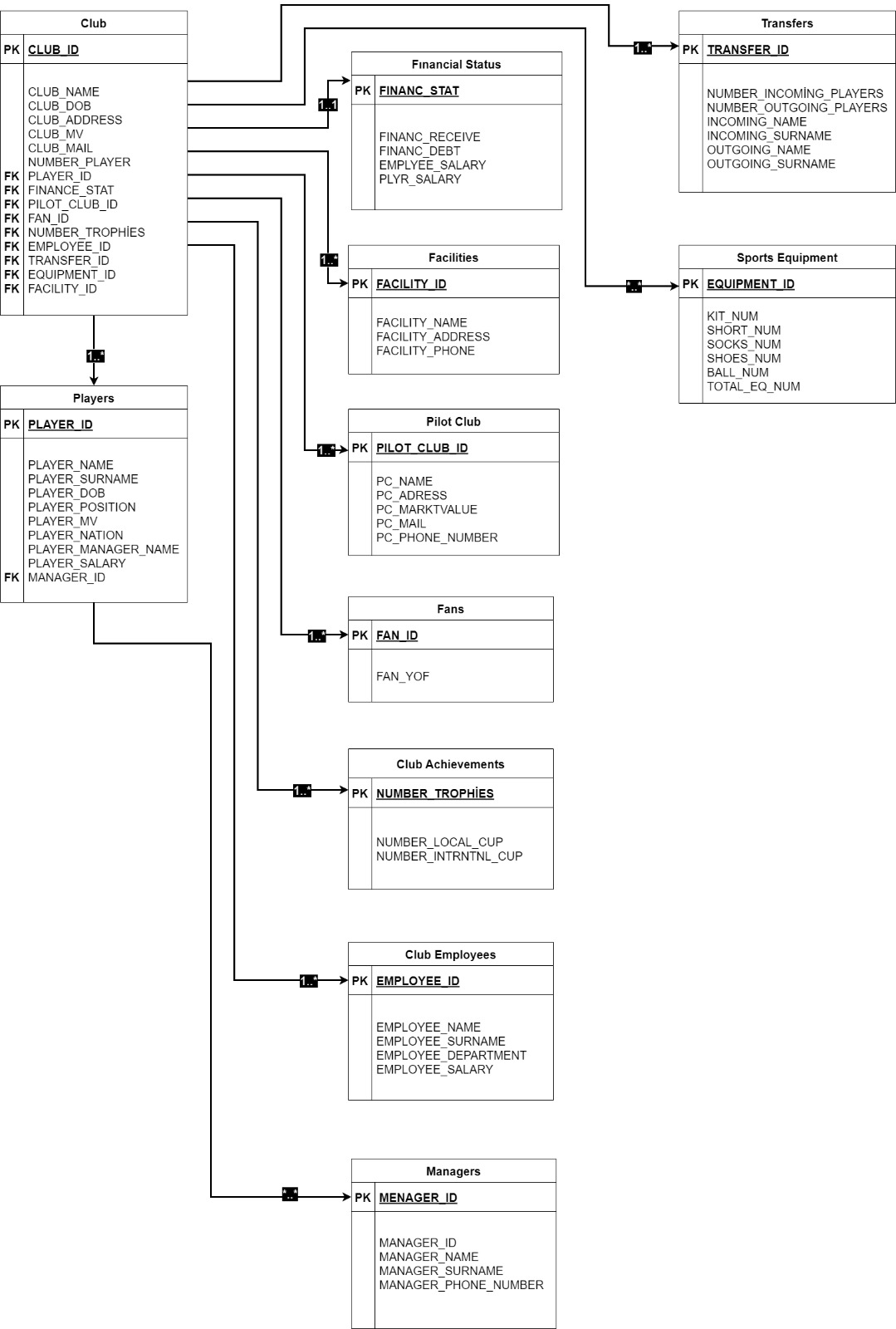
6) A player cannot have two or more managers.

7) A manager can work with more than one player.

8) Every manager must have a phone number and e-mail address for communication.

9) Clubs must provide the equipment that the players will use in the matches.

11) If a different club makes an offer to a player in the pilot club along with the main club, the main club has priority.



tablo içeren bir resim

Açıklama otomatik olarak oluşturulduDATABASE

DROP TABLE Club

DROP TABLE Players

DROP TABLE ClubAchievements

DROP TABLE SportEquipments

DROP TABLE Transfers

DROP TABLE ClubEmployees

DROP TABLE Facilities

DROP TABLE Managers

DROP TABLE Fans

DROP TABLE PilotClub

DROP TABLE Finance

CREATE TABLE Finance (

FINANCE\_STAT int PRIMARY KEY NOT NULL,

FINANC\_RECEİVE int DEFAULT(0),

FINANC\_DEBT int DEFAULT(0),

EMPLYEE\_SALARY int DEFAULT(0) ,

PLYR\_SALARY int DEFAULT(0)

)

CREATE TABLE PilotClub (

PILOT\_CLUB\_ID int PRIMARY KEY NOT NULL,

PC\_NAME nvarchar(30),

PC\_ADRESS nvarchar(100),

PC\_MARKET\_VALUE int,

PC\_MAIL nvarchar(60),

PC\_PHONE\_NUMBER nvarchar(25)

)

CREATE TABLE Fans (

FAN\_ID int PRIMARY KEY NOT NULL,

FAN\_YOF date

)

CREATE TABLE Managers (

MANAGER\_ID int PRIMARY KEY NOT NULL,

MANAGER\_NAME nvarchar(30) NOT NULL,

MANAGER\_SURNAME nvarchar(30) NOT NULL,

MANAGER\_PHONE\_NUMBER nvarchar(25)

)

CREATE TABLE Facilities (

FACILITY\_ID int PRIMARY KEY NOT NULL,

FACILITY\_NAME nvarchar(30) NOT NULL,

FACILITY\_ADDRESS nvarchar(100) NOT NULL,

FACILITY\_PHONE nvarchar(25)

)

CREATE TABLE ClubEmployees (

EMPLOYEE\_ID int PRIMARY KEY NOT NULL,

EMPLOYEE\_NAME nvarchar(30) NOT NULL,

EMPLOYEE\_SURNAME nvarchar(30) NOT NULL,

EMPLOYEE\_DEPARTMENT nvarchar(50) NOT NULL,

EMPLOYEE\_SALARY int NOT NULL,

)

CREATE TABLE Transfers (

TRANSFER\_ID int PRIMARY KEY NOT NULL,

NUMBER\_INCOMİNG\_PLAYERS int DEFAULT(0),

NUMBER\_OUTGOING\_PLAYERS int DEFAULT(0),

INCOMING\_NAME nvarchar(30),

INCOMING\_SURNAME nvarchar(30),

OUTGOING\_NAME nvarchar(30),

OUTGOING\_SURNAME nvarchar(30)

)

CREATE TABLE SportEquipments (

EQUIPMENT\_ID int PRIMARY KEY NOT NULL,

KIT\_NUM int DEFAULT(0),

SHORT\_NUM int DEFAULT(0),

SOCKS\_NUM int DEFAULT(0),

SHOES\_NUM int DEFAULT(0),

BALL\_NUM int DEFAULT(0),

TOTAL\_EQ\_NUM int DEFAULT(0)

)

CREATE TABLE ClubAchievements (

NUMBER\_TROPHİES int PRIMARY KEY NOT NULL,

NUMBER\_LOCAL\_CUP int,

NUMBER\_INTRNTNL\_CUP int

)

CREATE TABLE Players (

PLAYER\_ID int PRIMARY KEY NOT NULL,

PLAYER\_NAME nvarchar(30) NOT NULL,

PLAYER\_SURNAME nvarchar(30)NOT NULL,

PLAYER\_DOB date,

PLAYER\_POSITION nvarchar(20),

PLAYER\_MV int,

PLAYER\_NATION nvarchar(30),

PLAYER\_MANAGER\_NAME nvarchar(60),

PLAYER\_SALARY int,

MANAGER\_ID int,

CONSTRAINT fk\_mng FOREIGN KEY(MANAGER\_ID) REFERENCES Managers(MANAGER\_ID)

)

CREATE TABLE Club (

CLUB\_ID int PRIMARY KEY NOT NULL,

CLUB\_NAME nvarchar(30) NOT NULL,

CLUB\_DOB date NOT NULL,

CLUB\_ADDRESS nvarchar(100),

CLUB\_MV int,

CLUB\_MAIL nvarchar(60),

NUMBER\_PLAYER int NOT NULL,

PLAYER\_ID int NOT NULL,

FINANCE\_STAT int NOT NULL,

PILOT\_CLUB\_ID int NOT NULL,

FAN\_ID int NOT NULL,

NUMBER\_TROPHİES int NOT NULL,

EMPLOYEE\_ID int NOT NULL,

TRANSFER\_ID int NOT NULL,

EQUIPMENT\_ID int NOT NULL,

FACILITY\_ID int NOT NULL,

CONSTRAINT fk\_fac FOREIGN KEY(FACILITY\_ID) REFERENCES Facilities(FACILITY\_ID),

CONSTRAINT fk\_finance FOREIGN KEY(FINANCE\_STAT) REFERENCES Finance(FINANCE\_STAT),

CONSTRAINT fk\_pilot FOREIGN KEY(PILOT\_CLUB\_ID) REFERENCES PilotClub(PILOT\_CLUB\_ID),

CONSTRAINT fk\_fan FOREIGN KEY(FAN\_ID) REFERENCES Fans(FAN\_ID),

CONSTRAINT fk\_emp FOREIGN KEY(EMPLOYEE\_ID) REFERENCES ClubEmployees(EMPLOYEE\_ID),

CONSTRAINT fk\_trans FOREIGN KEY(TRANSFER\_ID) REFERENCES Transfers(TRANSFER\_ID),

CONSTRAINT fk\_eq FOREIGN KEY(EQUIPMENT\_ID) REFERENCES SportEquipments(EQUIPMENT\_ID),

CONSTRAINT fk\_ply FOREIGN KEY(PLAYER\_ID) REFERENCES Players(PLAYER\_ID),

CONSTRAINT fk\_trop FOREIGN KEY(NUMBER\_TROPHİES) REFERENCES ClubAchievements(NUMBER\_TROPHİES)

)

DATA ENTERED IN TABLES

INSERT INTO Club

VALUES ( 1905 , 'GALATASARAY' , '1905-10-01' , 'ALİ SAMİ YEN SPOR KOMPLEKSİ HUZUR MAH. SEYRANTEPE/SARIYER' ,

141000000 , 'galatasaray1905@gmail.com' , 29 , 93 , 125000000 , 1 , 905 , 98 , 234 , 35 , 23 , 34)

metin, iç mekan, ekran görüntüsü içeren bir resim

Açıklama otomatik olarak oluşturuldu

INSERT INTO ClubAchievements

VALUES ( 98 , 96 , 2)

metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

INSERT INTO ClubEmployees

VALUES (234 , 'AHMET' , 'YILMAZ' , 'ADMINISTRATION' , 40000 )

metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

INSERT INTO Facilities

VALUES ( 34 , 'Florya Metin Oktay Tesisleri' , 'Şenlikköy, Germeyan Sk. No:106/88, 34153 Bakırköy/İstanbul' , '5078955678')

metin, ekran görüntüsü, cihaz, çap ölçer içeren bir resim

Açıklama otomatik olarak oluşturuldu

INSERT INTO Fans

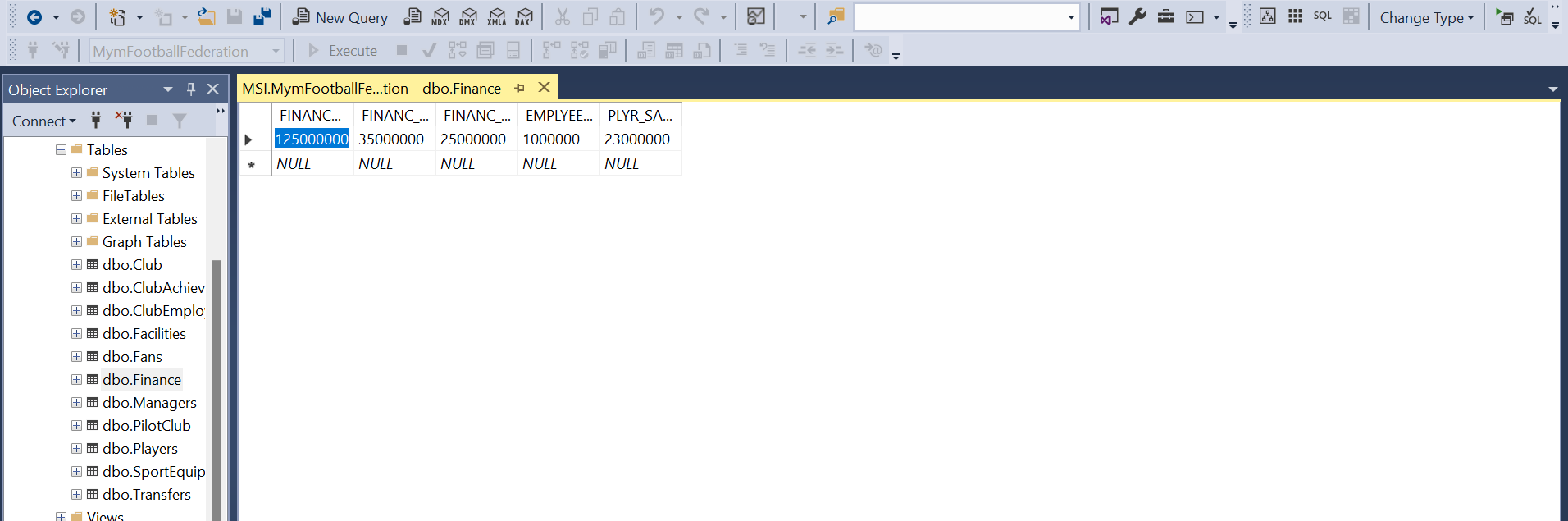
VALUES (905 , '2001-05-19')

metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

INSERT INTO Finance

VALUES (125000000 , 35000000 , 25000000 , 1000000 , 23000000)



INSERT INTO Managers

VALUES ( 1 , 'MERİÇ' , 'ASLAN' , '5389034587')

metin, ekran görüntüsü, cihaz içeren bir resim

Açıklama otomatik olarak oluşturuldu

INSERT INTO PilotClub

VALUES ( 1, 'Niğde Anadolu FK' , 'ŞAHİNALİ MAH.ŞEHİT FARUK EREN CAD.NO:6 MERKEZ NİĞDE' , 200000 , 'nıgdeanadolufk@gmail.com' , '5432345673')

metin, ekran görüntüsü, cihaz içeren bir resim

Açıklama otomatik olarak oluşturuldu

INSERT INTO Players

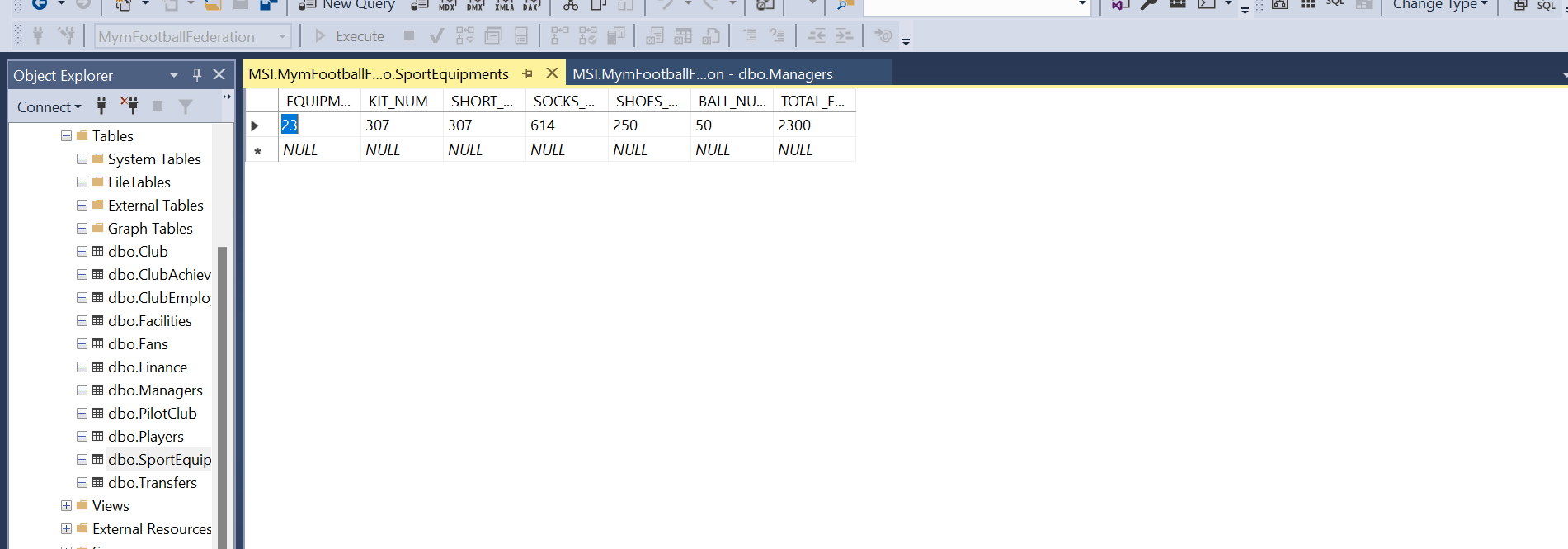
VALUES ( 93 , 'SACHA' , 'BOEY' , '2000-09-13' , 'RIGHT BACK' , 15000000 , 'FRANCE' , 'Meriç' , 1000000 , 1)

metin, ekran görüntüsü, iç mekan içeren bir resim

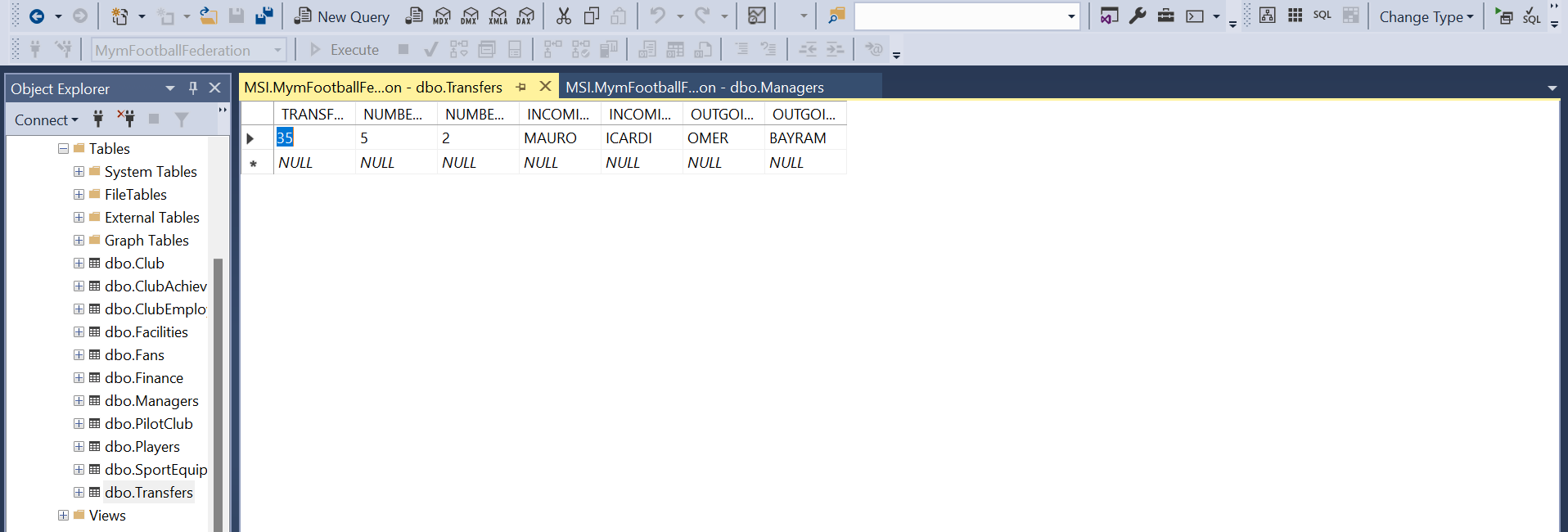
Açıklama otomatik olarak oluşturuldu

INSERT INTO SportEquipments

VALUES ( 23 , 307 , 307 , 614 , 250 , 50 , 2300)



INSERT INTO Transfers VALUES (35 , 5 , 2 , 'MAURO' , 'ICARDI' , 'OMER' , 'BAYRAM')

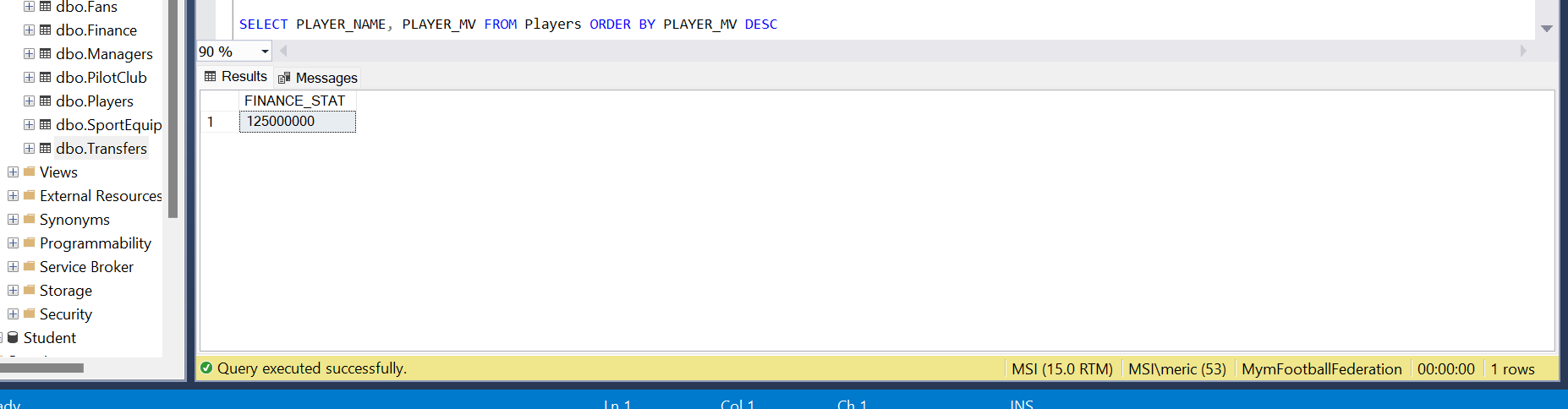


30 Meaningful SQL SELECT Commands

SELECT FINANCE\_STAT FROM Finance

WHERE EXISTS

(SELECT FINANC\_RECEİVE FROM Finance WHERE FINANC\_RECEİVE > FINANC\_DEBT)



SELECT FINANCE\_STAT, SUM(EMPLYEE\_SALARY + PLYR\_SALARY) AS "Total Salary"

FROM Finance

GROUP BY FINANCE\_STAT

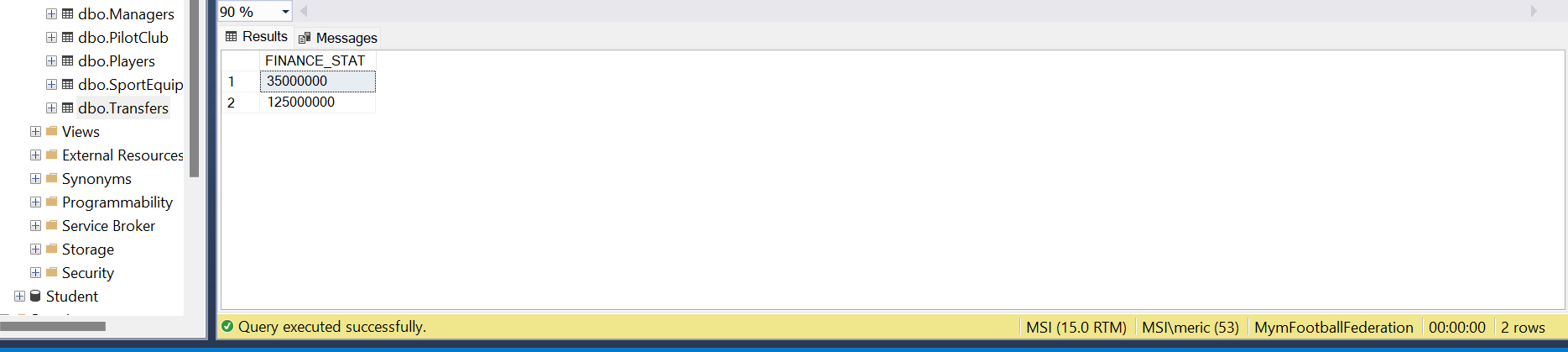
HAVING SUM(EMPLYEE\_SALARY + PLYR\_SALARY) > 100000



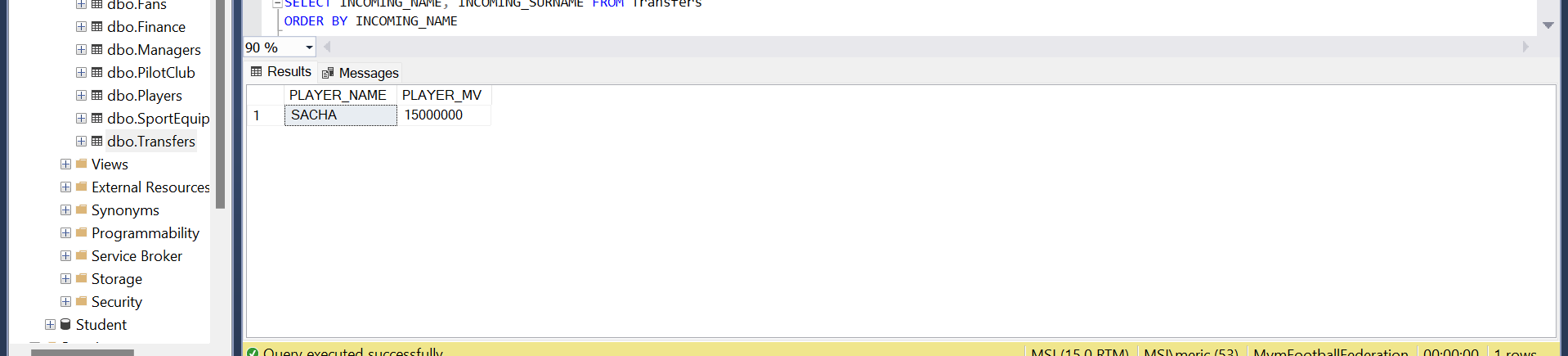
SELECT FINANCE\_STAT

FROM Finance

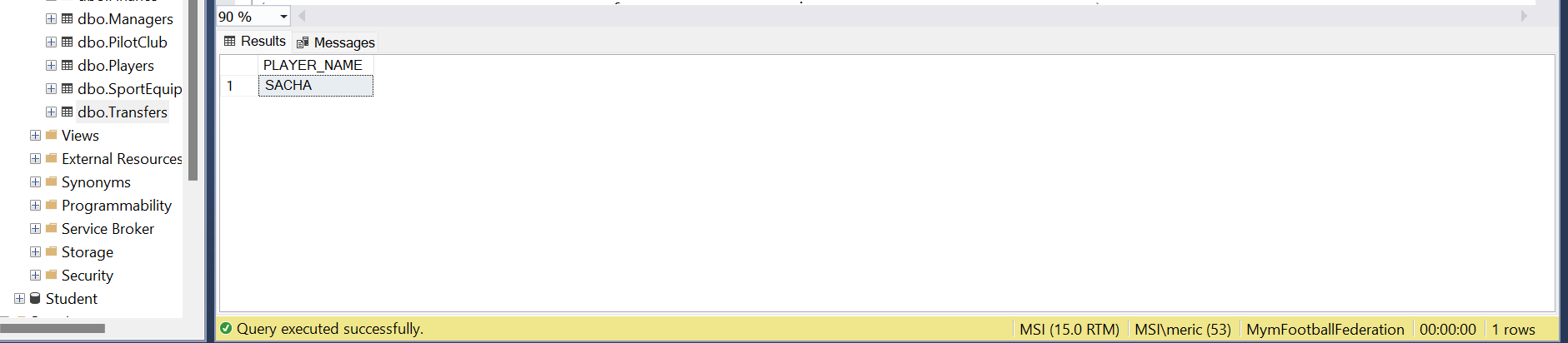
UNION SELECT FINANC\_RECEİVE FROM Finance



SELECT PLAYER\_NAME, PLAYER\_MV FROM Players ORDER BY PLAYER\_MV DESC

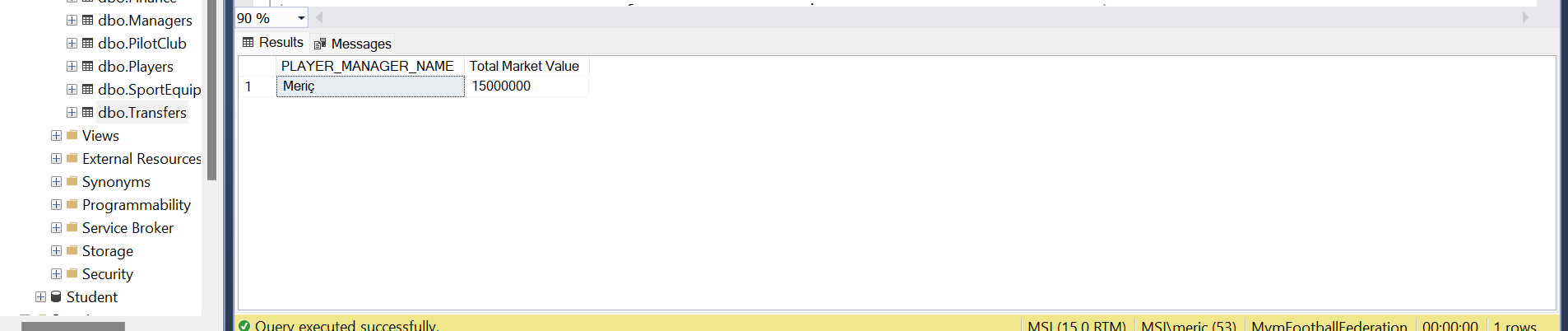


SELECT PLAYER\_NAME FROM Players WHERE EXISTS (SELECT PLAYER\_MANAGER\_NAME FROM Players WHERE PLAYER\_MANAGER\_NAME='Meriç')



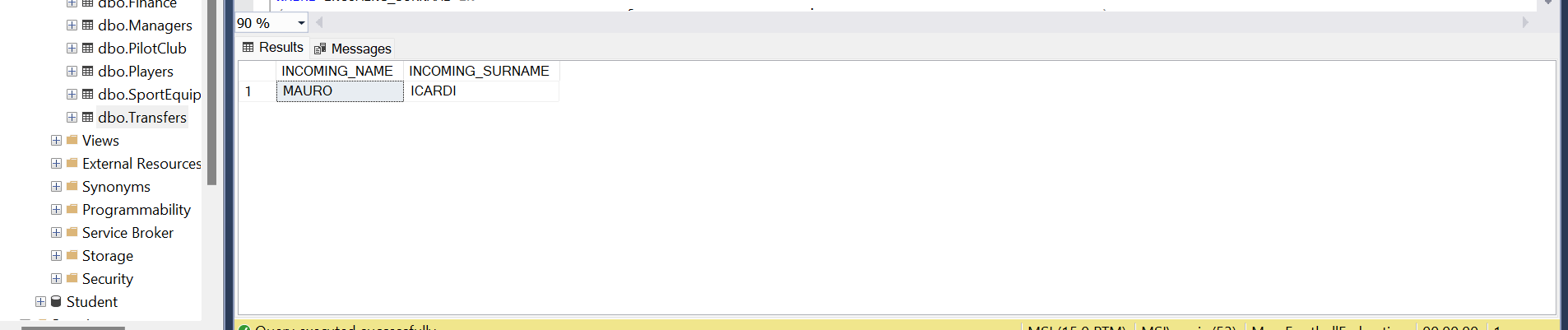
SELECT PLAYER\_MANAGER\_NAME, SUM(PLAYER\_MV) AS "Total Market Value" FROM Players

GROUP BY PLAYER\_MANAGER\_NAME HAVING SUM(PLAYER\_MV) > 10000000



SELECT INCOMING\_NAME, INCOMING\_SURNAME FROM Transfers

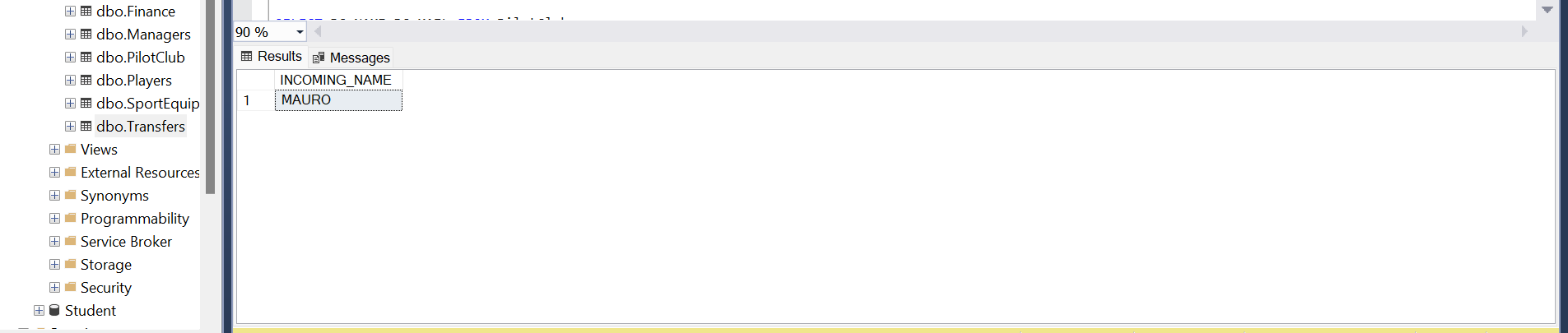
ORDER BY INCOMING\_NAME



SELECT INCOMING\_NAME FROM Transfers

WHERE INCOMING\_SURNAME IN

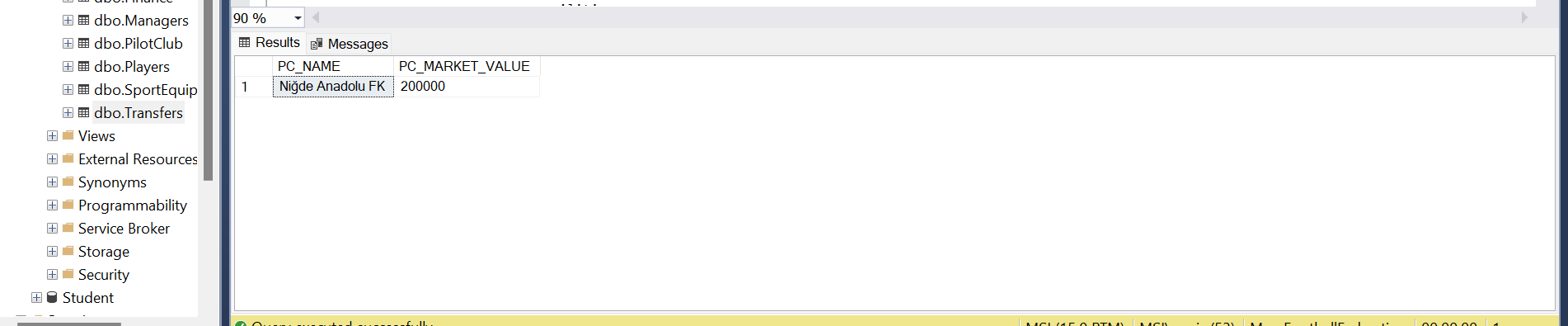
(SELECT DISTINCT INCOMING\_SURNAME FROM Transfers WHERE NUMBER\_INCOMİNG\_PLAYERS > NUMBER\_OUTGOING\_PLAYERS)



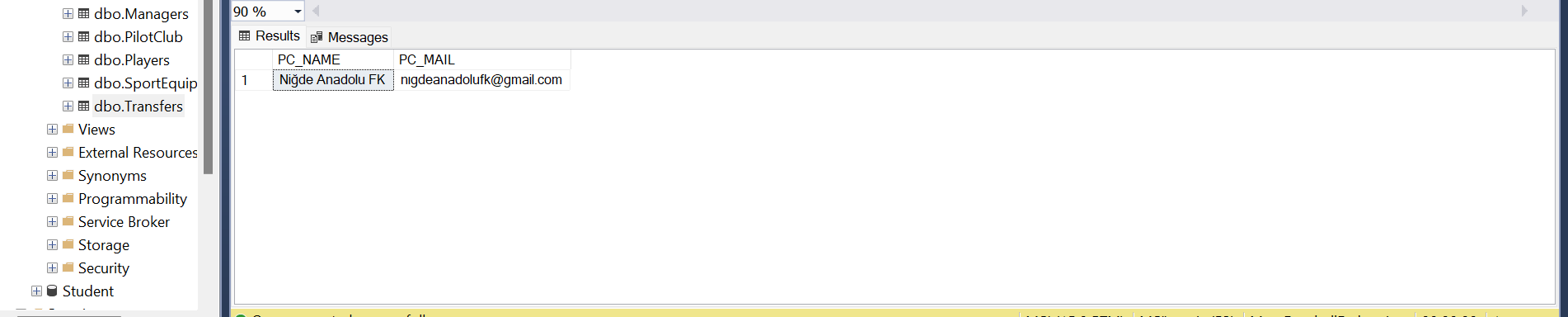
SELECT PC\_NAME, PC\_MARKET\_VALUE

FROM PilotClub

WHERE PC\_MARKET\_VALUE > 100000

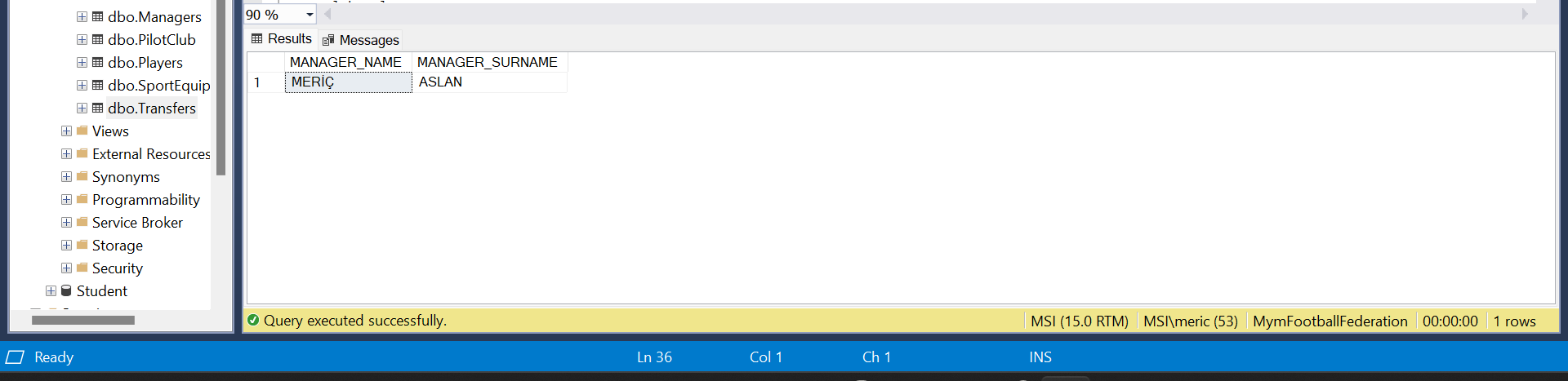


SELECT PC\_NAME,PC\_MAIL FROM PilotClub



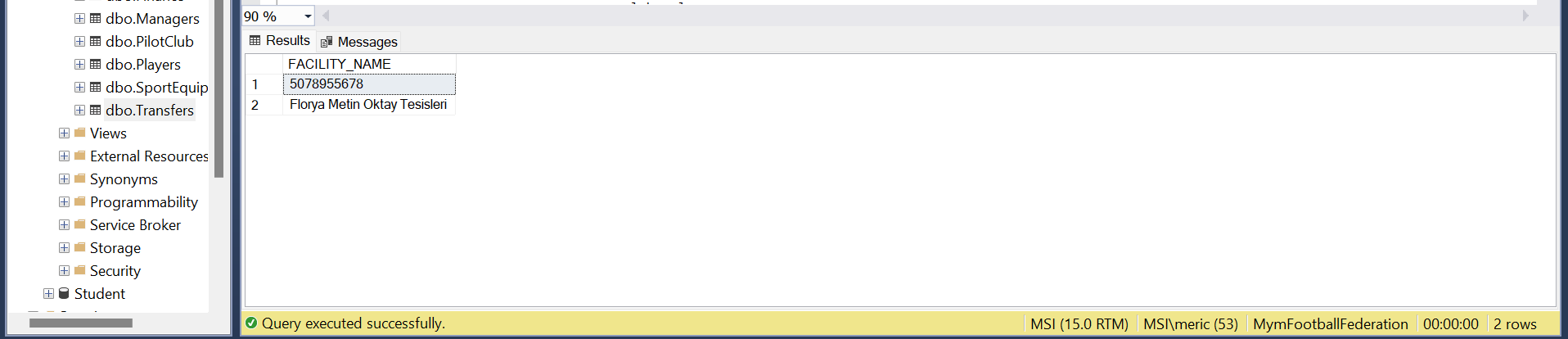
SELECT MANAGER\_NAME, MANAGER\_SURNAME FROM Managers

WHERE MANAGER\_NAME LIKE 'M%'



SELECT FACILITY\_NAME FROM Facilities

UNION SELECT FACILITY\_PHONE FROM Facilities



SELECT FACILITY\_ADDRESS, COUNT(FACILITY\_ID) FROM Facilities

GROUP BY FACILITY\_ADDRESS

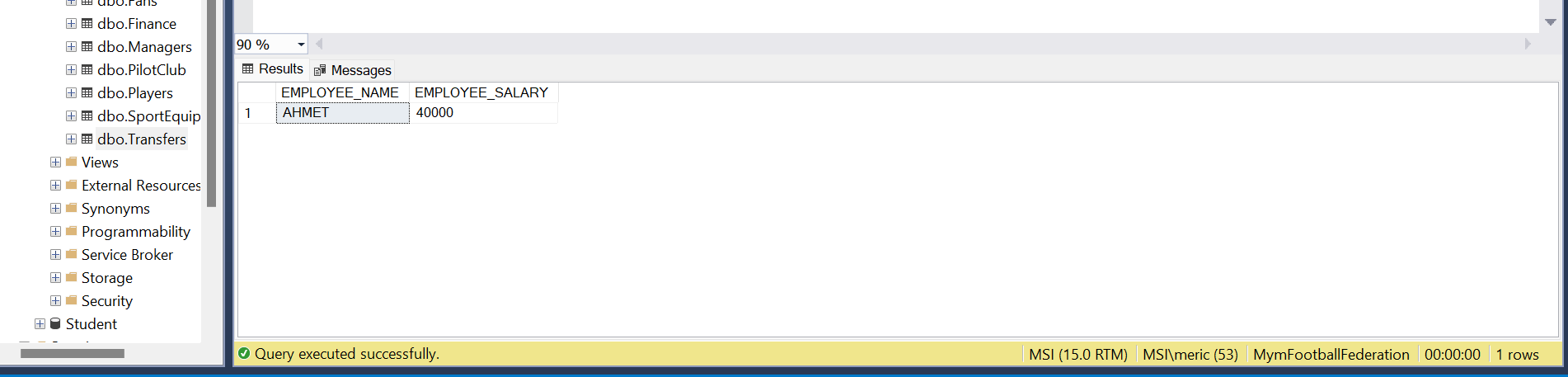
metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

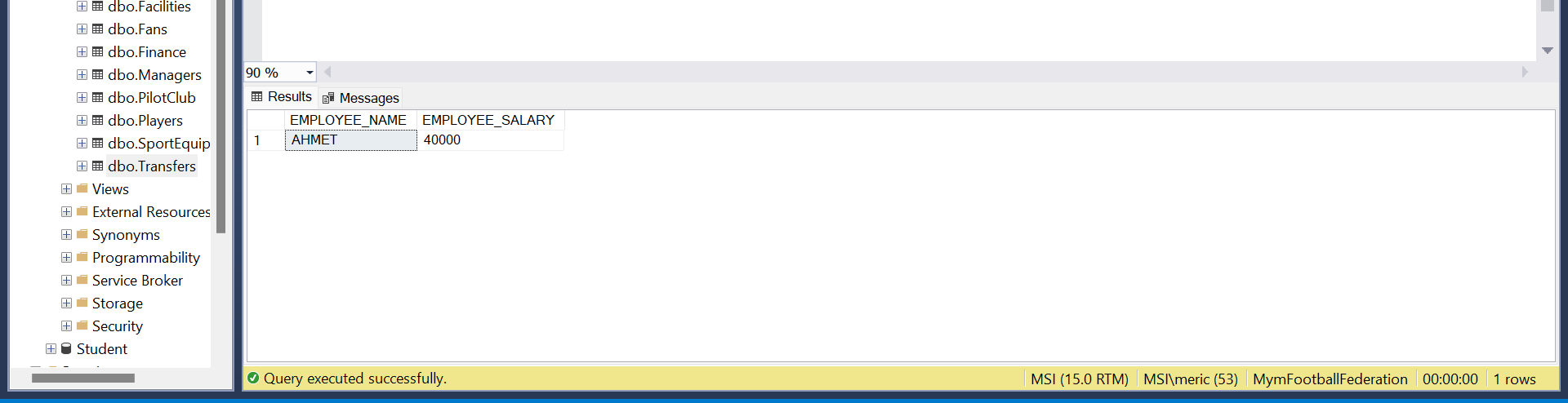
SELECT EMPLOYEE\_NAME, EMPLOYEE\_SALARY

FROM ClubEmployees

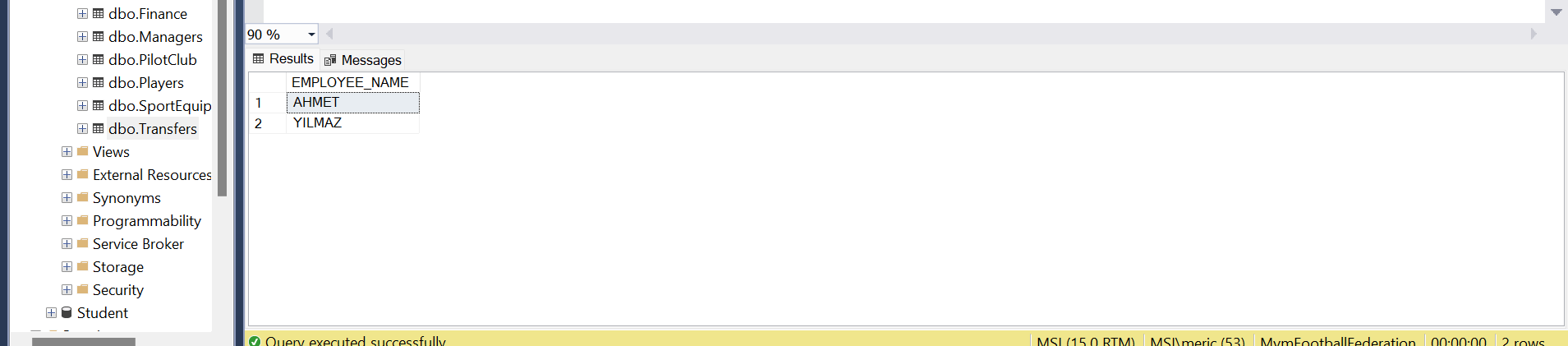
WHERE EMPLOYEE\_SALARY > 30000



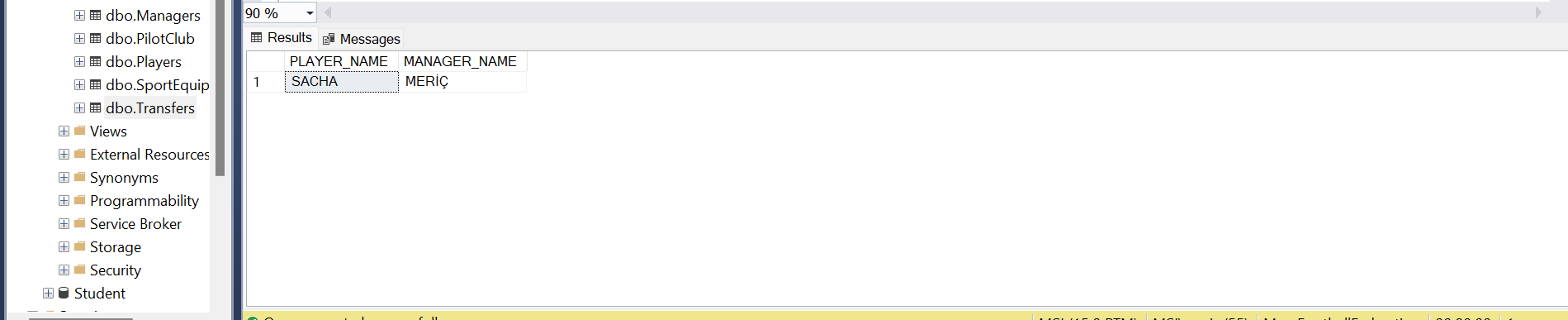
SELECT EMPLOYEE\_NAME, EMPLOYEE\_SALARY FROM ClubEmployees ORDER BY EMPLOYEE\_SALARY DESC



SELECT DISTINCT EMPLOYEE\_NAME FROM ClubEmployees UNION SELECT DISTINCT EMPLOYEE\_SURNAME FROM ClubEmployees



SELECT Players.PLAYER\_NAME, Managers.MANAGER\_NAME FROM Players INNER JOIN Managers ON Players.MANAGER\_ID = Managers.MANAGER\_ID



SELECT Players.PLAYER\_NAME, Managers.MANAGER\_NAME, Managers.MANAGER\_PHONE\_NUMBER FROM Players

LEFT JOIN Managers ON Players.MANAGER\_ID = Managers.MANAGER\_ID WHERE Players.PLAYER\_POSITION = 'RIGHT BACK'

metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

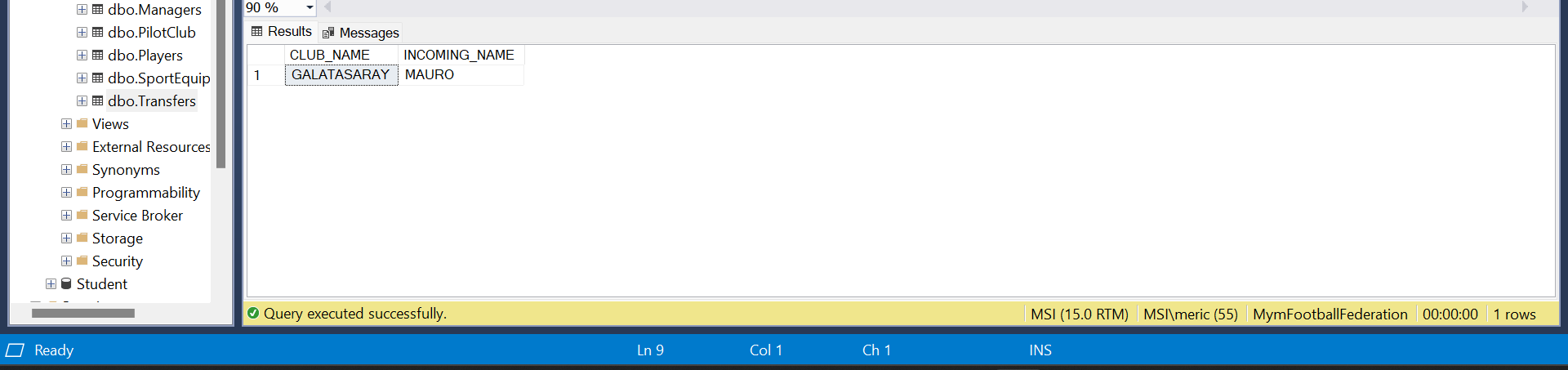
SELECT Players.PLAYER\_NAME, Managers.MANAGER\_NAME, Players.PLAYER\_MV, Managers.MANAGER\_PHONE\_NUMBER FROM Players

INNER JOIN Managers ON Players.MANAGER\_ID = Managers.MANAGER\_ID ORDER BY Players.PLAYER\_MV DESC

metin içeren bir resim

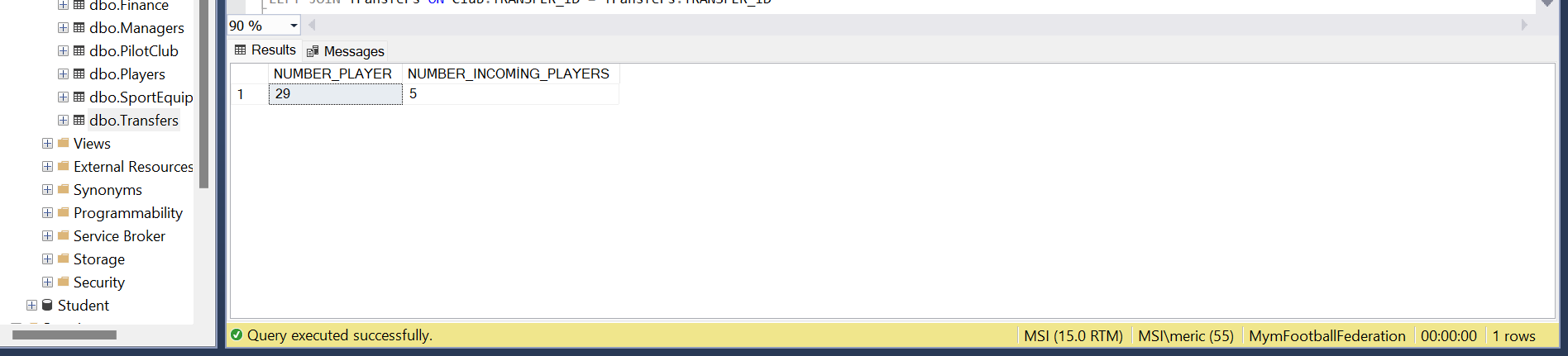
Açıklama otomatik olarak oluşturuldu

SELECT Club.CLUB\_NAME, Transfers.INCOMING\_NAME FROM Club LEFT JOIN Transfers ON Club.TRANSFER\_ID = Transfers.TRANSFER\_ID



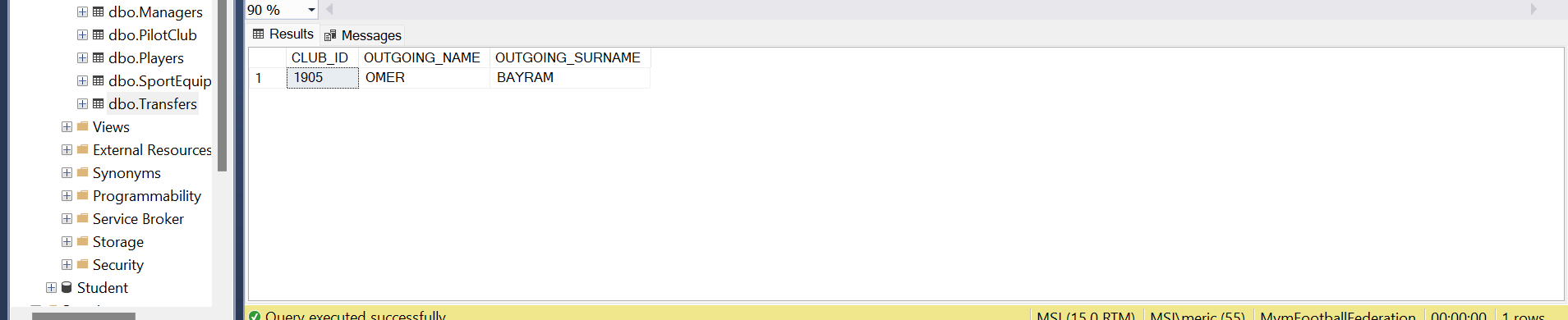
SELECT Club.NUMBER\_PLAYER, Transfers.NUMBER\_INCOMİNG\_PLAYERS FROM Club

LEFT JOIN Transfers ON Club.TRANSFER\_ID = Transfers.TRANSFER\_ID



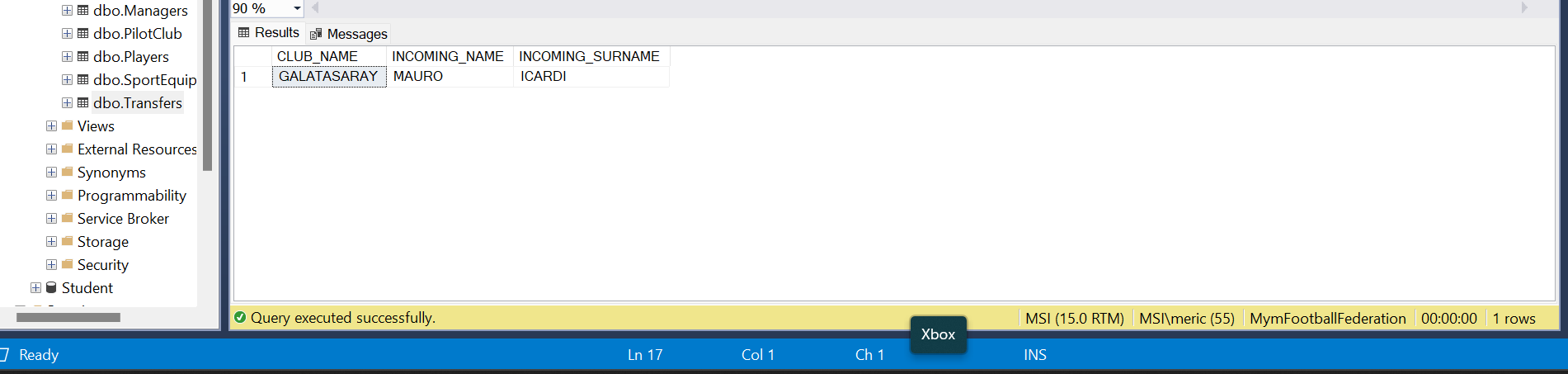
SELECT CLUB\_ID, OUTGOING\_NAME, OUTGOING\_SURNAME FROM Club

LEFT JOIN Transfers ON Club.TRANSFER\_ID = Transfers.TRANSFER\_ID



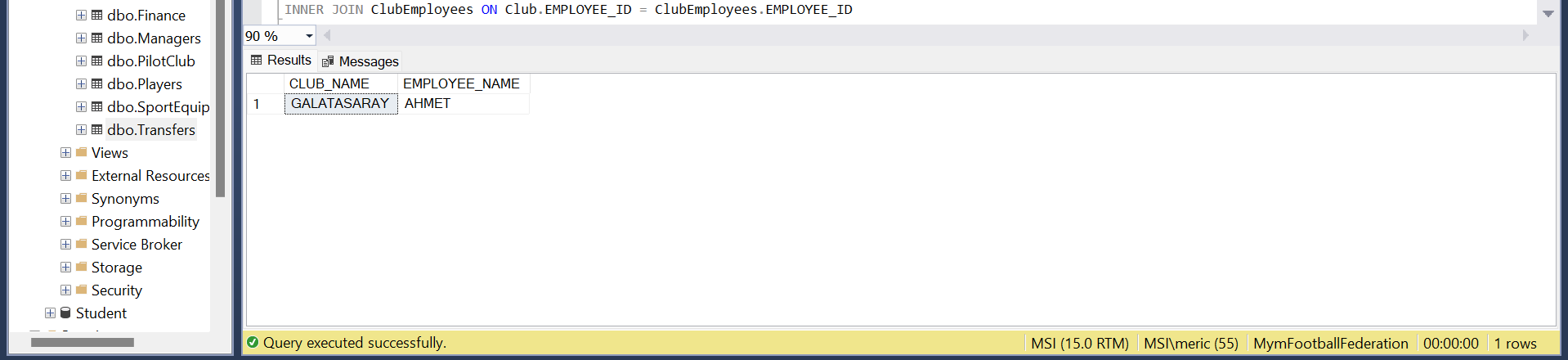
SELECT CLUB\_NAME, INCOMING\_NAME, INCOMING\_SURNAME FROM Club

LEFT JOIN Transfers ON Club.TRANSFER\_ID = Transfers.TRANSFER\_ID



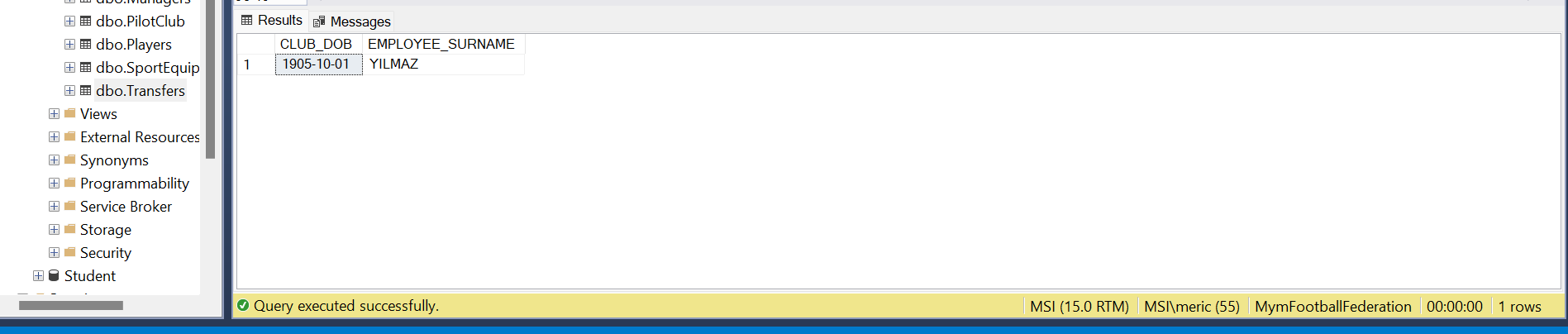
SELECT Club.CLUB\_NAME, ClubEmployees.EMPLOYEE\_NAME FROM Club

LEFT JOIN ClubEmployees ON Club.EMPLOYEE\_ID = ClubEmployees.EMPLOYEE\_ID



SELECT Club.CLUB\_DOB, ClubEmployees.EMPLOYEE\_SURNAME FROM Club

INNER JOIN ClubEmployees ON Club.EMPLOYEE\_ID = ClubEmployees.EMPLOYEE\_ID



SELECT Club.CLUB\_ADDRESS, ClubEmployees.EMPLOYEE\_NAME, ClubEmployees.EMPLOYEE\_SURNAME FROM Club

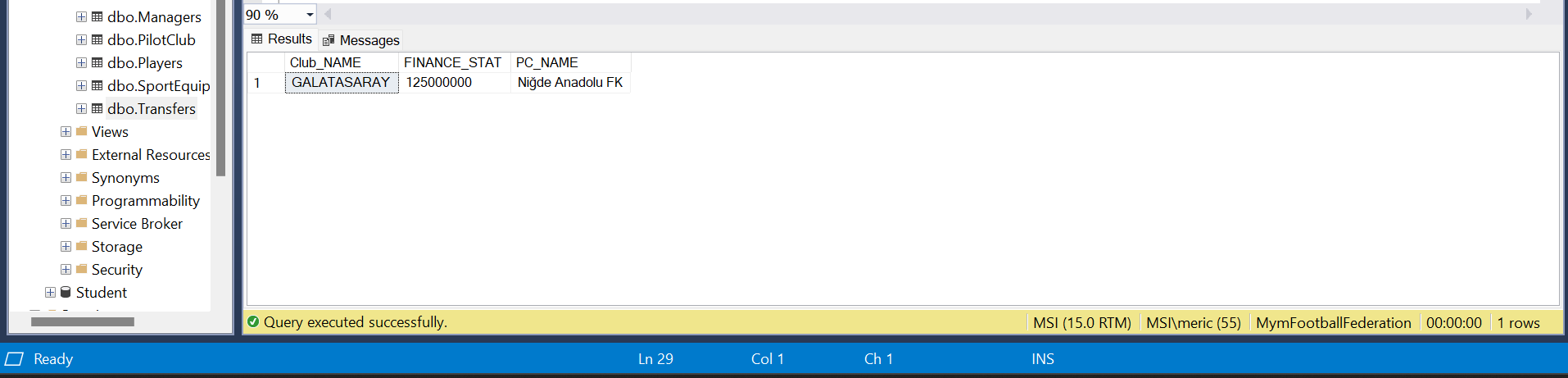
INNER JOIN ClubEmployees ON Club.EMPLOYEE\_ID = ClubEmployees.EMPLOYEE\_ID

metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

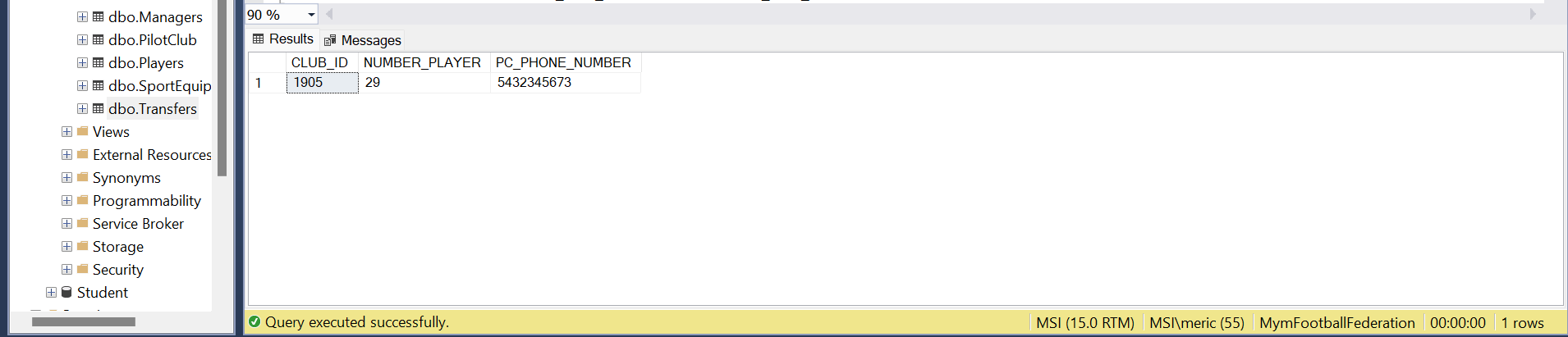
SELECT Club\_NAME, FINANCE\_STAT, PC\_NAME FROM Club

INNER JOIN PilotClub ON Club.PILOT\_CLUB\_ID = PilotClub.PILOT\_CLUB\_ID



SELECT CLUB\_ID, NUMBER\_PLAYER, PC\_PHONE\_NUMBER FROM Club

LEFT JOIN PilotClub ON Club.PILOT\_CLUB\_ID = PilotClub.PILOT\_CLUB\_ID



SELECT CLUB\_NAME, PC\_MARKET\_VALUE, PC\_MAIL FROM Club

INNER JOIN PilotClub ON Club.PILOT\_CLUB\_ID = PilotClub.PILOT\_CLUB\_ID

metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

SELECT Club\_ID, PC\_ADRESS FROM Club

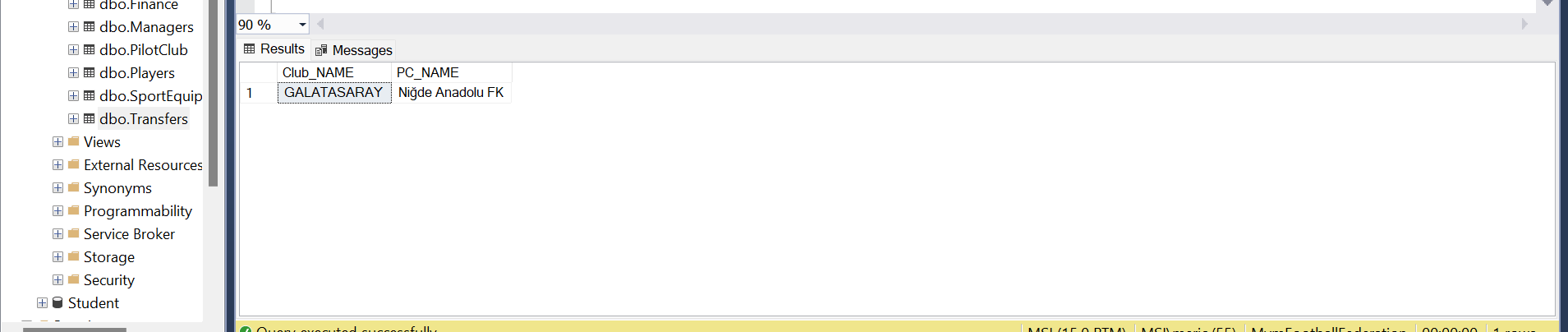
LEFT JOIN PilotClub ON Club.PILOT\_CLUB\_ID = PilotClub.PILOT\_CLUB\_ID

metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

SELECT Club\_NAME, PC\_NAME FROM Club

INNER JOIN PilotClub ON Club.PILOT\_CLUB\_ID = PilotClub.PILOT\_CLUB\_ID



CREATE VİEWS

CREATE VIEW Club\_Summary

AS SELECT CLUB\_ID, CLUB\_NAME, NUMBER\_PLAYER, NUMBER\_TROPHiES FROM Club

metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

CREATE VIEW Club\_Finance

AS SELECT CLUB\_NAME, FINANCE\_STAT, CLUB\_MV FROM Club

metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

CREATE VIEW Club\_Contact

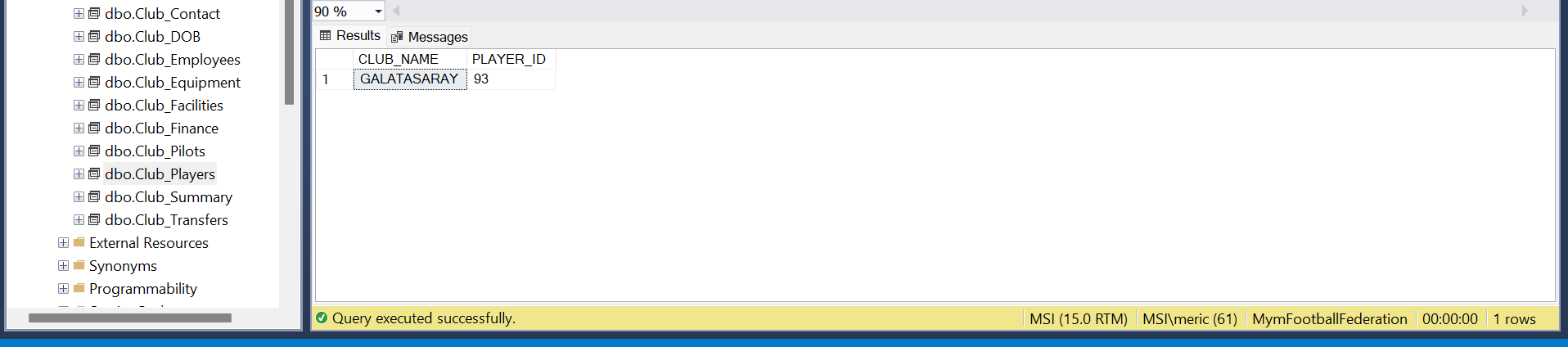
AS SELECT CLUB\_NAME, CLUB\_ADDRESS, CLUB\_MAIL FROM Club

metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

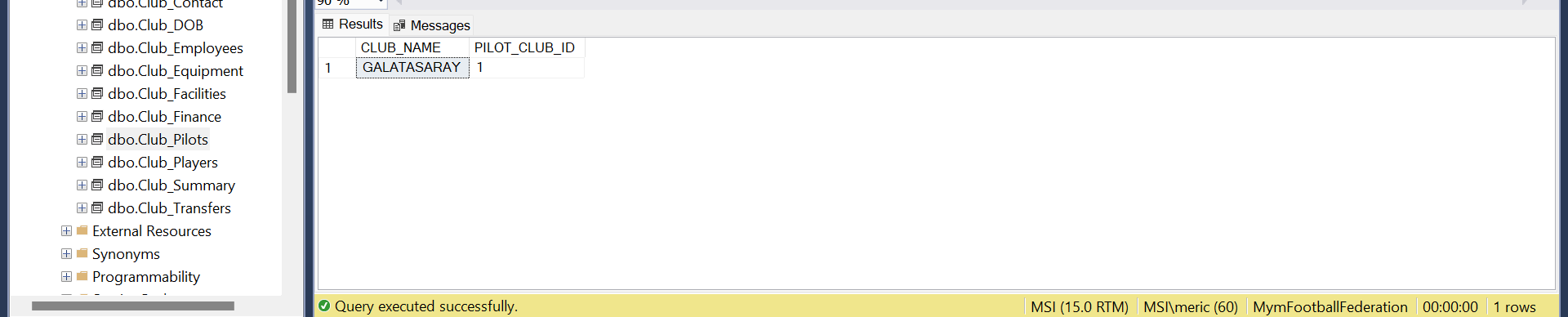
CREATE VIEW Club\_Players

AS SELECT CLUB\_NAME, PLAYER\_ID FROM Club



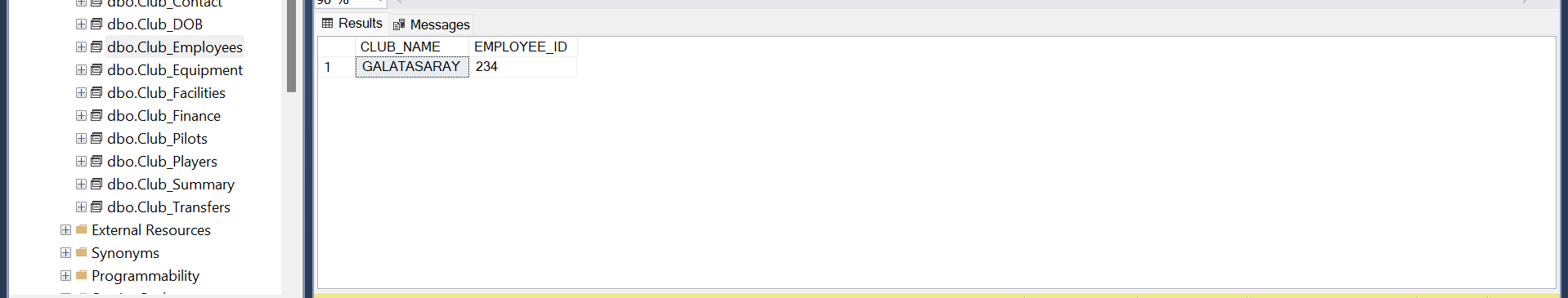
CREATE VIEW Club\_Pilots

AS SELECT CLUB\_NAME, PILOT\_CLUB\_ID FROM Club



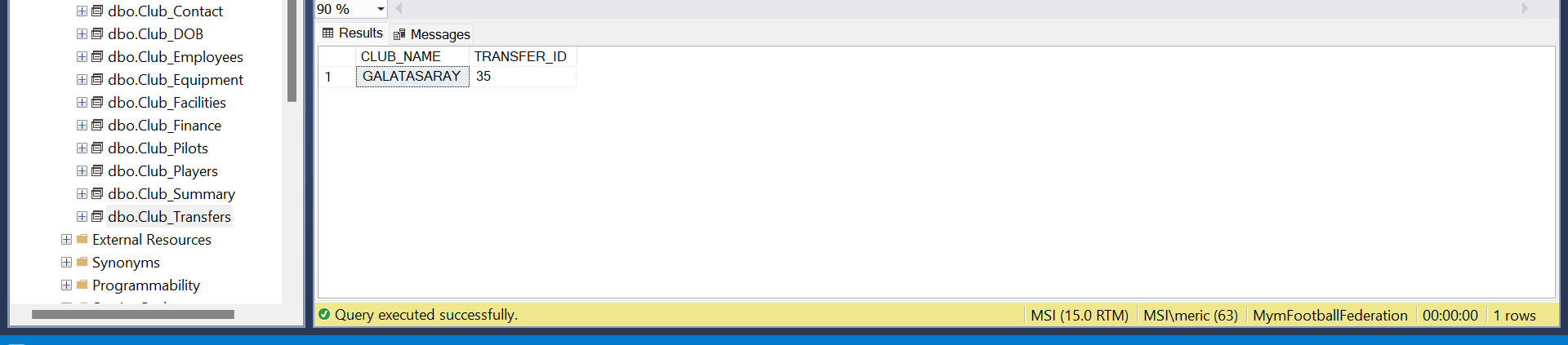
CREATE VIEW Club\_Employees

AS SELECT CLUB\_NAME, EMPLOYEE\_ID FROM Club



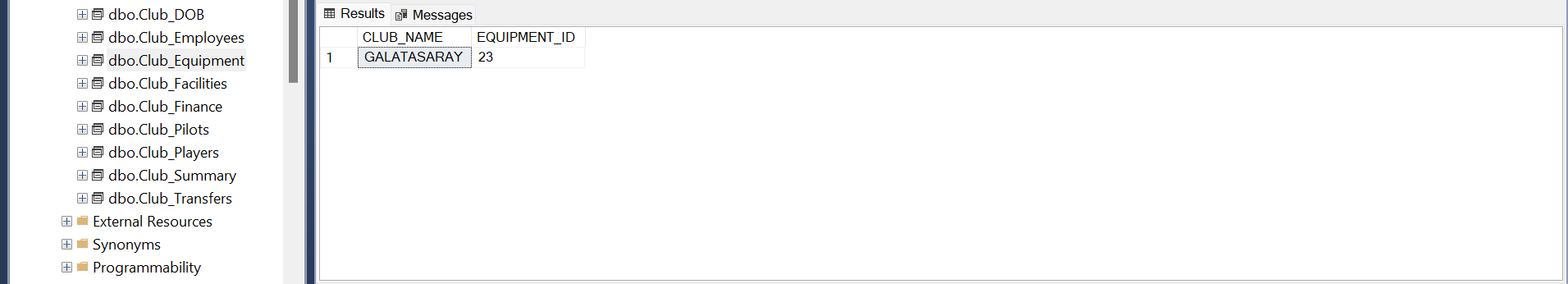
CREATE VIEW Club\_Transfers

AS SELECT CLUB\_NAME, TRANSFER\_ID FROM Club



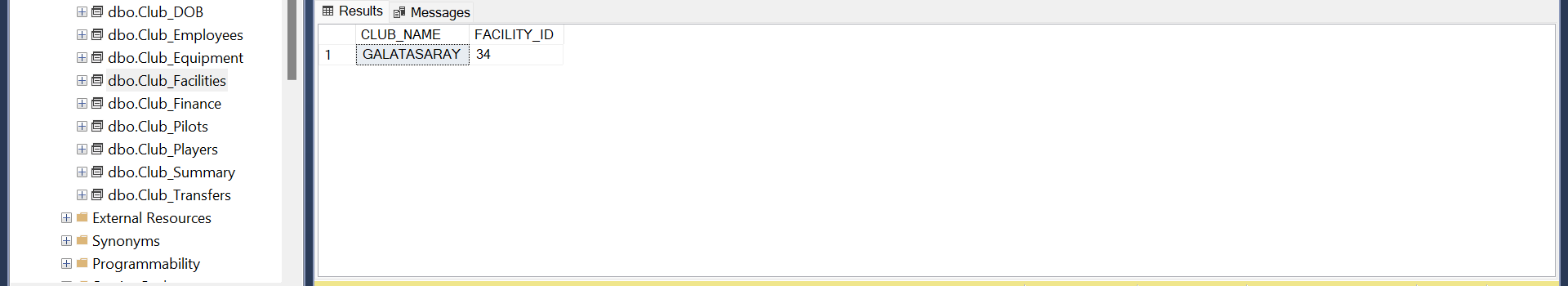
CREATE VIEW Club\_Equipment

AS SELECT CLUB\_NAME, EQUIPMENT\_ID FROM Club



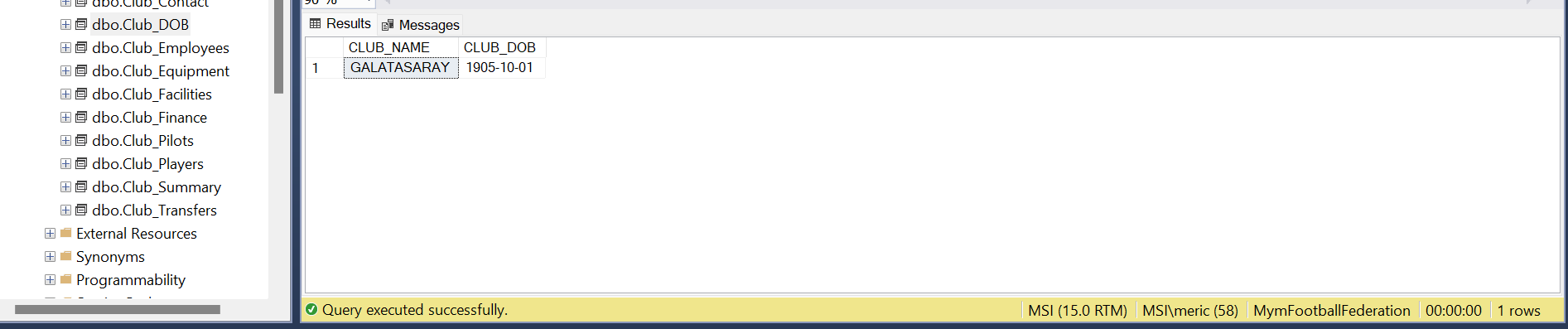
CREATE VIEW Club\_Facilities

AS SELECT CLUB\_NAME, FACILITY\_ID FROM Club



CREATE VIEW Club\_DOB

AS SELECT CLUB\_NAME, CLUB\_DOB FROM Club



ALTER TABLES

ALTER TABLE Club

ADD Stadium\_Name nvarchar(255)

ALTER TABLE Club

ADD Stadium\_Capacity int

ALTER TABLE Club

DROP COLUMN Stadium\_Capacity

ALTER TABLE Club

ADD FOREIGN KEY (PILOT\_CLUB\_ID) REFERENCES PilotClub(PILOT\_CLUB\_ID)

ALTER TABLE Club

DROP COLUMN FINANCE\_STAT

DROP TABLES

DROP TABLE Club

DROP TABLE Fans

DROP TABLE Facilities

DROP TABLE Finance

DROP TABLE Managers

UPDATES AND DELETES

UPDATE Club SET CLUB\_MV= 168000000

UPDATE PilotClub SET PC\_MARKET\_VALUE= 284000

UPDATE ClubAchievements SET NUMBER\_TROPHİES= 99

UPDATE ClubEmployees SET EMPLOYEE\_SALARY= 50000

UPDATE Facilities SET FACILITY\_PHONE= '5394543739'

DELETE FROM Club WHERE CLUB\_NAME = 'Galatasaray'

DELETE FROM Facilities WHERE FACILITY\_ID = 34

DELETE FROM Managers WHERE MANAGER\_NAME LIKE 'M%'

DELETE FROM PilotClub WHERE PC\_MARKET\_VALUE < 300000

DELETE FROM ClubEmployees WHERE EMPLOYEE\_DEPARTMENT = 'Doctor'