--------------------------------------CREATING THE DATABASE-----------------------------------------

CREATE DATABASE RealEstateDatabase;

GO

USE RealEstateDatabase;

GO

CREATE TABLE Employees

(

EmployeeID INT IDENTITY NOT NULL PRIMARY KEY,

FirstName NVARCHAR(25) NOT NULL,

SecondName NVARCHAR(25) NOT NULL,

LastName NVARCHAR(25) NOT NULL,

NIN NVARCHAR(30) NOT NULL,--National Identification Number (ЕГН)

PhoneNumber NVARCHAR(20) NOT NULL,

Email NVARCHAR(50) NOT NULL,

Addr NVARCHAR(50) NOT NULL,

CONSTRAINT UC\_EmployeesNIN UNIQUE (NIN)

);

GO

CREATE TABLE RealEstateTypes

(

RealEstateTypeID INT NOT NULL PRIMARY KEY,

RealEstateType NVARCHAR(20) NOT NULL--бизнес имот, къща, апартамент, гараж

CONSTRAINT UC\_RealEstateType UNIQUE (RealEstateType)

);

GO

CREATE TABLE [Town/Villages]

(

[Town/VillageID] INT NOT NULL PRIMARY KEY,

[Town/Village] NVARCHAR(50) NOT NULL,

CONSTRAINT UC\_TownVillage UNIQUE ([Town/Village])

);

GO

CREATE TABLE SellingClients

(

SellingClientID INT IDENTITY NOT NULL PRIMARY KEY,

Name NVARCHAR(50) NOT NULL,

NIN NVARCHAR(30) NOT NULL,--National Identification Number (ЕГН)

PhoneNumber NVARCHAR(20) NOT NULL,

Email NVARCHAR(50),

[Town/Village] INT,

Addr NVARCHAR(50),

ServByEmploy INT NOT NULL, -- по EmployeeID

CONSTRAINT FK\_SellingClients\_Employees FOREIGN KEY (ServByEmploy)

REFERENCES Employees(EmployeeID),

CONSTRAINT FK\_SellingClients\_TownVillage FOREIGN KEY ([Town/Village])

REFERENCES [Town/Villages]([Town/VillageID])

);

GO

CREATE TABLE BuyingClients

(

BuyingClientID INT IDENTITY NOT NULL PRIMARY KEY,

Name NVARCHAR(50) NOT NULL,

NIN NVARCHAR(30) NOT NULL,--National Identification Number (ЕГН)

PhoneNumber NVARCHAR(20) NOT NULL,

Email NVARCHAR(50),

[Town/Village] INT,

Addr NVARCHAR(50),

SearchForEstateType INT NOT NULL,--какъв вид имот търсят

MaxPrice INT NOT NULL, --максимално колко пари плащат... което разбира се не винаги е вярно

ServByEmploy INT NOT NULL, -- по EmployeeID

CONSTRAINT FK\_BuyingClients\_Employees FOREIGN KEY (ServByEmploy)

REFERENCES Employees(EmployeeID),

CONSTRAINT FK\_BuyingClients\_TownVillage FOREIGN KEY ([Town/Village])

REFERENCES [Town/Villages]([Town/VillageID]),

CONSTRAINT FK\_BuyingClients\_RealEstateTypes FOREIGN KEY (SearchForEstateType)

REFERENCES RealEstateTypes(RealEstateTypeID),

CONSTRAINT CHK\_MaxPrice CHECK (MaxPrice>0)

);

GO

CREATE TABLE RealEstatesArchitecture

(

ArchitectureID TINYINT NOT NULL PRIMARY KEY,

Architecture NVARCHAR(30) NOT NULL, --панел, тухла

CONSTRAINT UC\_Architecture UNIQUE (Architecture)

);

GO

CREATE TABLE Positions

(

PositionID INT NOT NULL PRIMARY KEY,

Position NVARCHAR(11) NOT NULL, --изток, запад, север, юг, югоизток, югозапад, североизток, северозапад, всички

CONSTRAINT UC\_Position UNIQUE (Position)

);

GO

CREATE TABLE Conditions

(

ConditionID TINYINT NOT NULL PRIMARY KEY,

Condition NVARCHAR(15) NOT NULL, --добри или лоши

CONSTRAINT UC\_Condition UNIQUE (Condition)

);

GO

CREATE TABLE Regions

(

RegionID TINYINT NOT NULL PRIMARY KEY,

Region NVARCHAR(50) NOT NULL,

CONSTRAINT UC\_Region UNIQUE (Region)

);

GO

CREATE TABLE RealEstatesInfo

(

RealEstateID INT IDENTITY NOT NULL PRIMARY KEY,

RealEstateType INT NOT NULL,--бизнес имот, къща, апартамент, гараж

Area INT NOT NULL,--в квадратни метри

Architecture TINYINT,

Photos IMAGE,

Region TINYINT NOT NULL, --Област

[Town/Village] INT NOT NULL,

Addr NVARCHAR(50) NOT NULL,

Position INT NOT NULL,

Conditions TINYINT NOT NULL,

[Floor] INT NOT NULL, --етажът на който се намира или колко етажа има (в зависимост от видът на обекта)

Rooms INT NOT NULL,

AskingPrice MONEY CHECK (AskingPrice>0),

OwnerID INT NOT NULL,

CONSTRAINT FK\_RealEstatesInfo\_SellingClients FOREIGN KEY (OwnerID)

REFERENCES SellingClients(SellingClientID),

CONSTRAINT CHK\_Floor CHECK ([Floor]>=0),

CONSTRAINT CHK\_Rooms CHECK (Rooms>0),

CONSTRAINT FK\_RealEstatesInfo\_RealEstateTypes FOREIGN KEY (RealEstateType)

REFERENCES RealEstateTypes(RealEstateTypeID),

CONSTRAINT FK\_RealEstatesInfo\_RealEstatesArchitecture FOREIGN KEY (Architecture)

REFERENCES RealEstatesArchitecture(ArchitectureID),

CONSTRAINT FK\_RealEstatesInfo\_TownVillages FOREIGN KEY ([Town/Village])

REFERENCES [Town/Villages]([Town/VillageID]),

CONSTRAINT FK\_RealEstatesInfo\_Position FOREIGN KEY (Position)

REFERENCES Positions(PositionID),

CONSTRAINT FK\_RealEstatesInfo\_Conditions FOREIGN KEY (Conditions)

REFERENCES Conditions(ConditionID),

CONSTRAINT FK\_RealEstatesInfo\_Regions FOREIGN KEY (Region)

REFERENCES Regions(RegionID)

);

GO

CREATE TABLE EmployeesSalary

(

EmployeeID INT NOT NULL PRIMARY KEY,

CurrentSalary MONEY DEFAULT 0,-- минималната заплата

SalesMade INT DEFAULT 0,--общо продажби (при повече продажби даденият служител ще получава бонус към месечната си заплата )

CONSTRAINT FK\_EmployeesSalary\_Employees FOREIGN KEY (EmployeeID)

REFERENCES Employees(EmployeeID),

CONSTRAINT CHK\_EmployeesSalary CHECK (CurrentSalary>=0 AND SalesMade>=0)

);

GO

CREATE TABLE Purchases

(

PurchaseID INT IDENTITY NOT NULL PRIMARY KEY,

DateBought SMALLDATETIME,

SoldPrice MONEY CHECK (SoldPrice>0),

RealEstateID INT UNIQUE NOT NULL,

SellingClientID INT NOT NULL,

BuyingClientID INT NOT NULL,

DealMadeByEmployeeID INT NOT NULL,

DealMadeByEmployeeID2 INT, --може да има сделка при която купуващият клиент е на един брокер, а продаващият на друг

CONSTRAINT FK\_Purchases\_EstatesInfo FOREIGN KEY (RealEstateID)

REFERENCES RealEstatesInfo(RealEstateID),

CONSTRAINT FK\_Purchases\_Employees FOREIGN KEY (DealMadeByEmployeeID)

REFERENCES Employees(EmployeeID),

CONSTRAINT FK\_Purchases\_SellingClients FOREIGN KEY (SellingClientID)

REFERENCES SellingClients(SellingClientID),

CONSTRAINT FK\_Purchases\_BuyingClients FOREIGN KEY (BuyingClientID)

REFERENCES BuyingClients(BuyingClientID),

CONSTRAINT FK\_Purchases\_Employees2 FOREIGN KEY (DealMadeByEmployeeID2)

REFERENCES Employees(EmployeeID),

CONSTRAINT CHK\_EmployeeID CHECK (DealMadeByEmployeeID !=DealMadeByEmployeeID2) -- да не би някой служител да иска да си начисли допълнителни доходи

);

---------------------------------------Triggers-----------------------------------------------------

--Update на SalesMade

GO

CREATE TRIGGER tr\_EmployeesSalaryPurchasesUpdate --при INSERT в Purchases таблицата

ON Purchases

AFTER INSERT

AS

BEGIN

UPDATE EmployeesSalary

SET EmployeesSalary.SalesMade=EmployeesSalary.SalesMade+1

WHERE EmployeesSalary.EmployeeID IN (SELECT inserted.DealMadeByEmployeeID

FROM inserted

WHERE DateBought IS NOT NULL)

END

GO

CREATE TRIGGER tr\_EmployeesSalaryPurchasesUpdate2 --при INSERT в Purchases таблицата

ON Purchases

AFTER INSERT

AS

BEGIN

UPDATE EmployeesSalary

SET EmployeesSalary.SalesMade=EmployeesSalary.SalesMade+1

WHERE EmployeesSalary.EmployeeID IN (SELECT inserted.DealMadeByEmployeeID2

FROM inserted

WHERE DateBought IS NOT NULL)

END

GO

ALTER TABLE EmployeesSalary

ADD BonusSalary AS ((SalesMade)\*200) PERSISTED --бонус

----------------------------------------------------------------------------------------------------

---------------------------------FILLING THE DATABASE-----------------------------------------------

-------------------------------------Regions--------------------------------------------------------

GO

INSERT INTO Regions (RegionID,Region)

VALUES (1, 'Велико Търново');

GO

----------------------------------------------------------------------------------------------------

------------------------------------------Positions-------------------------------------------------

INSERT INTO Positions (PositionID, Position)

VALUES (1, 'изток');

INSERT INTO Positions (PositionID, Position)

VALUES (2, 'запад');

INSERT INTO Positions (PositionID, Position)

VALUES (3, 'север');

INSERT INTO Positions (PositionID, Position)

VALUES (4, 'юг');

INSERT INTO Positions (PositionID, Position)

VALUES (5, 'югоизток');

INSERT INTO Positions (PositionID, Position)

VALUES (6, 'югозапад');

INSERT INTO Positions (PositionID, Position)

VALUES (7, 'североизток');

INSERT INTO Positions (PositionID, Position)

VALUES (8, 'северозапад');

INSERT INTO Positions (PositionID, Position)

VALUES (9, 'всички');

GO

----------------------------------------------------------------------------------------------------

------------------------------RealEstatesArchitecture-----------------------------------------------

INSERT INTO RealEstatesArchitecture(ArchitectureID,Architecture)

VALUES (0, 'тухла');

INSERT INTO RealEstatesArchitecture(ArchitectureID,Architecture)

VALUES (1, 'панел');

GO

----------------------------------------------------------------------------------------------------

-------------------------------------Conditions-----------------------------------------------------

INSERT INTO Conditions(ConditionID, Condition)

VALUES (0, 'добри');

INSERT INTO Conditions(ConditionID, Condition)

VALUES (1, 'лоши');

GO

----------------------------------------------------------------------------------------------------

----------------------------------[Town/Villages]---------------------------------------------------

GO

INSERT INTO [Town/Villages]([Town/VillageID],[Town/Village])

VALUES (1,'Велико Търново');

INSERT INTO [Town/Villages]([Town/VillageID],[Town/Village])

VALUES (2,'София');

INSERT INTO [Town/Villages]([Town/VillageID],[Town/Village])

VALUES (3,'Пловдив');

INSERT INTO [Town/Villages]([Town/VillageID],[Town/Village])

VALUES (4,'Арбанаси');

GO

----------------------------------------------------------------------------------------------------

-----------------------------------Employees--------------------------------------------------------

INSERT INTO Employees (FirstName, SecondName, LastName, NIN, PhoneNumber, Email, Addr)

VALUES ('Иван', 'Ахмедов', 'Чобанов','7401206441','0886485512','ivan1234@gmail.com','Филип Тотю 23');

INSERT INTO Employees (FirstName, SecondName, LastName, NIN, PhoneNumber, Email, Addr)

VALUES ('Петър', 'Шишманов', 'Чекеров','8002022066','0890150012','pesho\_chekerov@abv.bg','Емилиян Станев 5');

INSERT INTO Employees (FirstName, SecondName, LastName, NIN, PhoneNumber, Email, Addr)

VALUES ('Петя', 'Асенова', 'Димитрова','9007166670','0888894105','petq.dimitrova@abv.bg','Любен Каравелов 2');

----------------------------------------------------------------------------------------------------

---------------------------------------RealEstateTypes----------------------------------------------

GO

INSERT INTO RealEstateTypes (RealEstateTypeID,RealEstateType)

VALUES (1,'Бизнес имот');

INSERT INTO RealEstateTypes (RealEstateTypeID,RealEstateType)

VALUES (2,'Къща');

INSERT INTO RealEstateTypes (RealEstateTypeID,RealEstateType)

VALUES (3,'Апартамент');

INSERT INTO RealEstateTypes (RealEstateTypeID,RealEstateType)

VALUES (4,'Гараж');

----------------------------------------------------------------------------------------------------

--------------------------------------BuyingClients-------------------------------------------------

GO

INSERT INTO BuyingClients(Name, NIN, PhoneNumber, Email, [Town/Village], Addr, SearchForEstateType, MaxPrice, ServByEmploy)

VALUES ('Хасан Мехмедов Спиридонов', '6003125609','0886015532','hasan-mehmedov@abv.bg',1 ,'Иван Асен 3',1,1000000 ,1);

INSERT INTO BuyingClients(Name, NIN, PhoneNumber, Email, [Town/Village], Addr, SearchForEstateType, MaxPrice, ServByEmploy)

VALUES ('Дебора Маргаритова Илийцева','7707049715','0897121417','debi-mag@abv.bg',1 ,'Христо Ботев 22', 4,27000,1);

INSERT INTO BuyingClients(Name, NIN, PhoneNumber, Email, [Town/Village], Addr, SearchForEstateType, MaxPrice, ServByEmploy)

VALUES ('Ани Венетова Кристинова', '7103099123', '0894127744', 'anito\_kriska@abv.bg', 1 , 'Сергей Румянцев 18', 2,50000,1);

GO

----------------------------------------------------------------------------------------------------

--------------------------------------SellingClients------------------------------------------------

INSERT INTO SellingClients(Name, NIN, PhoneNumber, Email, [Town/Village], Addr, ServByEmploy)

VALUES ('Християн Атанасов Черкезов', '7504059761', '0896427677', 'hristo-atanasov@abv.bg', 1, 'Мария Габровска 1', 3);

INSERT INTO SellingClients(Name, NIN, PhoneNumber, Email, [Town/Village], Addr, ServByEmploy)

VALUES ('Сияна Славова Калинкова','6304146839','0881681111','kiki-siq@abv.bg',1 ,'Чавдар войвода 16', 2);

INSERT INTO SellingClients(Name, NIN, PhoneNumber, Email, [Town/Village], Addr, ServByEmploy)

VALUES ('Чудомир Чудомиров Петров','7212302882','0895461244','chudo-petrov@abv.bg',1 ,'Цар Самуил 5', 2);

INSERT INTO SellingClients(Name, NIN, PhoneNumber, Email, [Town/Village], Addr, ServByEmploy)

VALUES ('Янислав Сребринов Георгиев','7607181688','0884114474','qni-g@abv.bg',2 ,'Аксаков 5', 3);

----------------------------------------------------------------------------------------------------

---------------------------------------RealEstatesInfo----------------------------------------------

GO

INSERT INTO RealEstatesInfo(RealEstateType, Area, Architecture, Photos, Region, [Town/Village], Addr, Position, Conditions, [Floor], Rooms, AskingPrice,OwnerID)

VALUES (1,9500,0, NULL, 1,1, 'Димитър Иванов 5', 9,0,4,15,1100000,2);

INSERT INTO RealEstatesInfo(RealEstateType, Area, Architecture, Photos, Region, [Town/Village], Addr, Position, Conditions, [Floor], Rooms, AskingPrice,OwnerID)

VALUES (4,5,0, NULL, 1,1, 'Марно поле 36',8,1,0,1,30000,3);

INSERT INTO RealEstatesInfo(RealEstateType, Area, Architecture, Photos, Region, [Town/Village], Addr, Position, Conditions, [Floor], Rooms, AskingPrice,OwnerID)

VALUES (3,170,1, NULL,1, 1,'Илия Янулов 5',3,0,2,10,60000,4);

INSERT INTO RealEstatesInfo(RealEstateType, Area, Architecture, Photos, Region, [Town/Village], Addr, Position, Conditions, [Floor], Rooms, AskingPrice,OwnerID)

VALUES (2,500,0, NULL,1,4,'Капитан Павел Грамадов 12',9,0,2,9,100000,1);

INSERT INTO RealEstatesInfo(RealEstateType, Area, Architecture, Photos, Region, [Town/Village], Addr, Position, Conditions, [Floor], Rooms, AskingPrice,OwnerID)

VALUES (3,150,0, NULL, 1,1,'Мария Кирова 3',2,0,5,7,70000,3);

INSERT INTO RealEstatesInfo(RealEstateType, Area, Architecture, Photos, Region, [Town/Village], Addr, Position, Conditions, [Floor], Rooms, AskingPrice,OwnerID)

VALUES (3,110,0, NULL, 1,1,'Поп Харитон 16',3,0,3,6,29000,2);

INSERT INTO RealEstatesInfo(RealEstateType, Area, Architecture, Photos, Region, [Town/Village], Addr, Position, Conditions, [Floor], Rooms, AskingPrice,OwnerID)

VALUES (3,90,1, NULL, 1,1,'Чумерна 7',4,0,3,6,29000,1);

----------------------------------------------------------------------------------------------------

---------------------------------------EmployeesSalary----------------------------------------------

GO --минимална заплата

INSERT INTO EmployeesSalary (EmployeeID, CurrentSalary)

VALUES (1, '400');

INSERT INTO EmployeesSalary (EmployeeID, CurrentSalary)

VALUES (2, '400');

INSERT INTO EmployeesSalary (EmployeeID, CurrentSalary)

VALUES (3, '400');

GO

----------------------------------------------------------------------------------------------------

-----------------------------------Purchases--------------------------------------------------------

--SMALLDATETIME - format: YYYY-MM-DD HH:MI:SS

INSERT INTO Purchases(DateBought, SoldPrice, RealEstateID, SellingClientID, BuyingClientID, DealMadeByEmployeeID,DealMadeByEmployeeID2)

VALUES ('20161015 15:10:03','1000000',1, 1,1,1,2); --Бизнес имот 9500 квадратни метра

INSERT INTO Purchases(DateBought, SoldPrice, RealEstateID, SellingClientID, BuyingClientID, DealMadeByEmployeeID)

VALUES ('20161219 13:13:30','28000',2, 2,2,2); --Гараж 5 квадратни метра

----------------------------------------------------------------------------------------------------