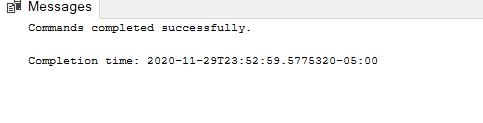
Abby Sedivy, Joe Duppstadt, Brice Baerga

**CREATING DATABASE:**

CREATE DATABASE finalProject;



**Creating Types for the Database:**

CREATE TYPE DonorID FROM INT NOT NULL;

CREATE TYPE Name FROM VARCHAR(255) NOT NULL;

CREATE TYPE Address FROM VARCHAR(255) NOT NULL;

CREATE TYPE Phone FROM VARCHAR(255) NOT NULL;

CREATE TYPE Email FROM VARCHAR(255) NOT NULL;

CREATE TYPE Role FROM INT NOT NULL;

CREATE TYPE Category FROM VARCHAR(255) NOT NULL;

CREATE TYPE ParentOf FROM VARCHAR(255) NOT NULL;

CREATE TYPE Position FROM VARCHAR(255) NOT NULL;

CREATE TYPE GraduationYear FROM VARCHAR(255) NOT NULL;

CREATE TYPE CorpName FROM VARCHAR(255) NOT NULL;

CREATE TYPE Amount FROM INT NOT NULL;

CREATE TYPE Date FROM VARCHAR(255) NOT NULL;

CREATE TYPE planID FROM INT NOT NULL;

CREATE TYPE DonorTier FROM VARCHAR(255) NOT NULL;

CREATE TYPE PledgeID FROM INT NOT NULL;

CREATE TYPE fundraiserID FROM INT NOT NULL;

CREATE TYPE AmountLeft FROM INT;

CREATE TYPE nextPaymentDate FROM VARCHAR(255);

CREATE TYPE ClassRepID FROM INT NOT NULL;

CREATE TYPE YOG FROM INT NOT NULL;

CREATE TYPE ReunionDate FROM VARCHAR(255) NOT NULL;

CREATE TYPE nameOfFundraiser FROM VARCHAR(255) NOT NULL;

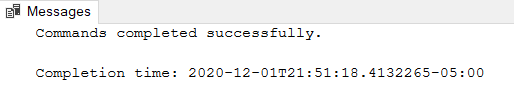
CREATE TYPE location FROM VARCHAR(255) NOT NULL;

CREATE TYPE season FROM VARCHAR(255) NOT NULL;

CREATE TYPE attendance FROM VARCHAR(255) NOT NULL;

CREATE TYPE volunteerID FROM INT NOT NULL;

CREATE TYPE Job FROM VARCHAR(255) NOT NULL;



**Potential Donor**

CREATE TABLE PotentialDonor (

DonorID DonorID,

Name Name,

Address Address,

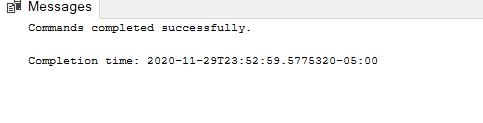
Phone Phone,

Email Email,

Role Role,

PRIMARY KEY (DonorID, Role)

);



**Sub Classes**

DROP TABLE GraduatingSenior

CREATE TABLE GraduatingSenior (

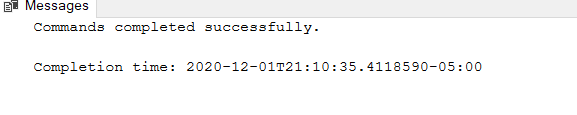
DonorID DonorID,

Role as 1 persisted, -- graduating senior

Category Category,

foreign key (DonorID, Role) references PotentialDonor(DonorID, Role)

)

****

DROP TABLE Parent

CREATE TABLE Parent (

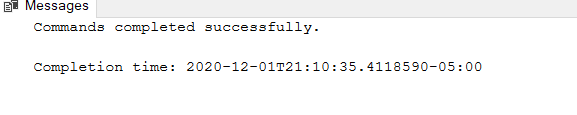
DonorID DonorID,

Role as 2 persisted, -- parent

ParentOf ParentOf,

foreign key (DonorID, Role) references PotentialDonor(DonorID, Role)

)

****

DROP TABLE Staff

CREATE TABLE Staff (

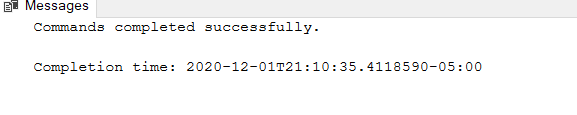
DonorID DonorID,

Role as 3 persisted, -- staff

Position Position,

foreign key (DonorID, Role) references PotentialDonor(DonorID, Role)

)

****

DROP TABLE Alumni

CREATE TABLE Alumni (

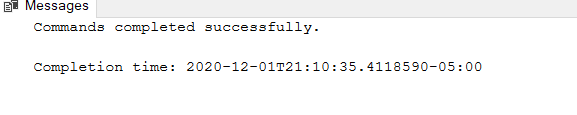
DonorID DonorID,

Role as 4 persisted, -- alumni

GraduationYear GraduationYear,

foreign key (DonorID, Role) references PotentialDonor(DonorID, Role)

)



DROP TABLE Corporation

CREATE TABLE Corporation (

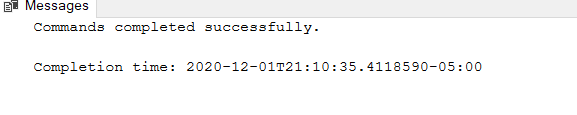
DonorID DonorID,

Role as 5 persisted, -- corporation

CorpName CorpName,

foreign key (DonorID, Role) references PotentialDonor(DonorID, Role)

)



DROP TABLE Faculty

CREATE TABLE Faculty (

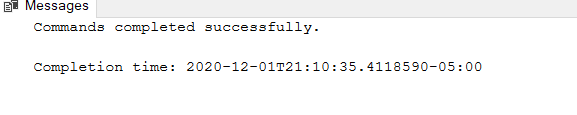
DonorID DonorID,

Role as 6 persisted, -- faculty

Position Position,

foreign key (DonorID, Role) references PotentialDonor(DonorID, Role)

)



INSERT INTO PotentialDonor(DonorID, Name, Address, Phone, Email, Role)

VALUES

(1, 'Gabriel Bloom', '51 E. Clay Street', '757-213-8167' ,'gbloom56@gmail.com','Senior'),

(2, 'Kara Bray' ,'7710 Summer Street', '757-215-3256' ,'karabray@outlook.com', 'Staff'),

(3, 'Francesco Searle' ,'3225 Wimbledon Way', '757-332-4533' ,'francescosearle@gmail.com' ,'Parent'),

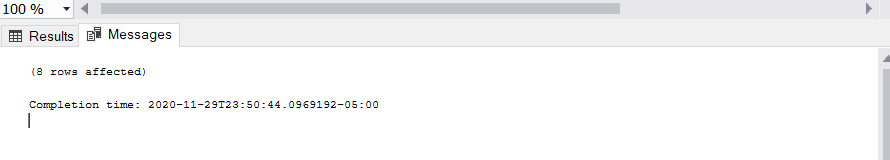
(4, 'Bea Searle', '3225 Wimbledon Way', '757-443-4532' ,'beasearle@yahoo.com', 'Alumni'),

(5, 'Shauna Delgado', '1083 Holland Road', '814-306-7745' ,'shaunadelgado@gmail.com','Staff'),

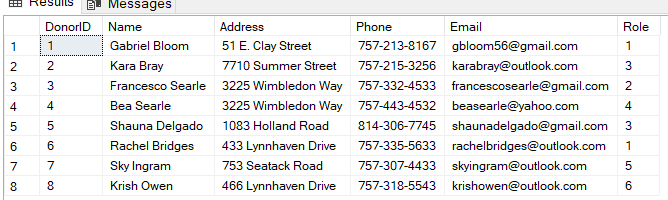
(6, 'Rachel Bridges', '433 Lynnhaven Drive' ,'757-335-5633' ,'rachelbridges@outlook.com', 'Senior'),

(7, 'Sky Ingram', '753 Seatack Road', '757-307-4433' ,'skyingram@outlook.com' ,'Corporation'),

(8,'Krish Owen', '466 Lynnhaven Drive' ,'757-318-5543', 'krishowen@outlook.com', 'Faculty');



SELECT \* FROM PotentialDonor



INSERT INTO GraduatingSenior(DonorID, Category) VALUES (1, 'Graduating Senior');

INSERT INTO Staff(DonorID, Position) VALUES (2, 'Staff - Janitor');

INSERT INTO Parent(DonorID, ParentOf) VALUES (3, 'Parent of Bea Searle');

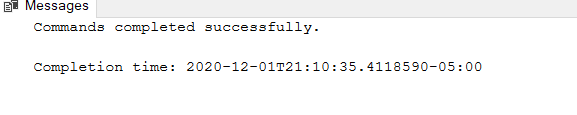
INSERT INTO Alumni(DonorID, GraduationYear) VALUES (4, 'Graduated 2016');

INSERT INTO Staff (DonorID, Position) VALUES (5, 'Staff - Professor');

INSERT INTO GraduatingSenior(DonorID, Category) VALUES (6, 'Graduating Senior');

INSERT INTO Corporation(DonorID, CorpName) VALUES (7, 'Apple Inc.');

INSERT INTO Faculty(DonorID, Position) VALUES (8, 'Receptionist');



**Donations Table**

DROP TABLE Donation;

CREATE TABLE Donation (

DonorID DonorID,

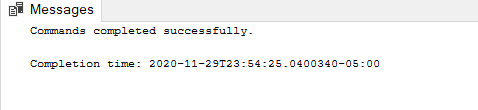
Amount Amount,

Date Date,

planID planID,

PRIMARY KEY (DonorID, planID)

);



INSERT INTO Donation(DonorID, Amount, Date, PlanID) VALUES

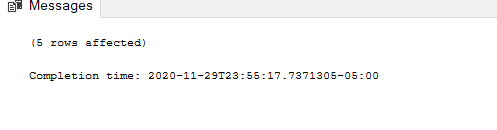
(2,10000,'4/6/2020',1),

(5,100,'4/7/2020',2),

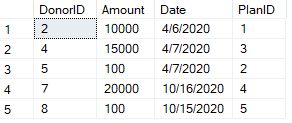
(4,15000,'4/7/2020',3),

(7,20000,'10/16/2020',4),

(8,100,'10/15/2020',5);



SELECT \* FROM Donation



**DonationTier Table \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

DROP TABLE DonationTier;

CREATE TABLE DonationTier (

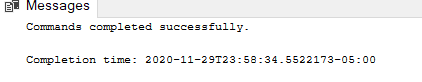
DonorID DonorID,

Amount Amount,

DonorTier DonorTier,

PRIMARY KEY (DonorID, Amount)

);



INSERT INTO DonationTier(DonorID, Amount, DonorTier) VALUES

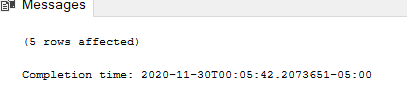
(2, 10000, 'Silver'),

(5, 100, 'Regular'),

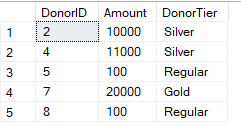
(4, 11000, 'Silver'),

(7, 20000, 'Gold'),

(8, 100, 'Regular');



SELECT \* FROM DonationTier



**Pledge**

DROP TABLE Pledge;

CREATE TABLE Pledge (

DonorID DonorID,

PledgeID PledgeID,

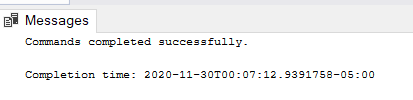
Date Date,

Amount Amount,

fundraiserID fundraiserID,

PRIMARY KEY (PledgeID)

);



INSERT INTO Pledge (DonorID, PledgeID, Date, Amount, FundraiserID) VALUES

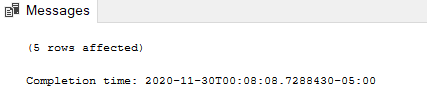
(1,1,'4/6/2020',500,1),

(3,2,'4/6/2020',10000,1),

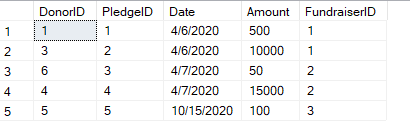
(6,3,'4/7/2020',50,2),

(4,4,'4/7/2020',15000,2),

(5,5,'10/15/2020',100,3);



SELECT \* FROM Pledge



**Payment Plan**

DROP TABLE PaymentPlan

CREATE TABLE PaymentPlan (

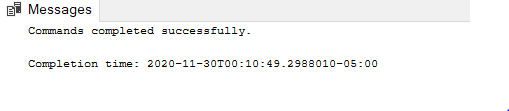
AmountLeft AmountLeft,

nextPaymentDate nextPaymentDate),

planID planID,

PRIMARY KEY (planID)

);



INSERT INTO PaymentPlan(AmountLeft, nextPaymentDate, planID) VALUES

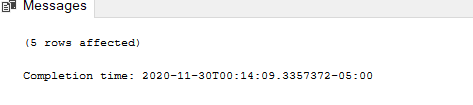
(NULL, NULL, 1),

(NULL, NULL, 2),

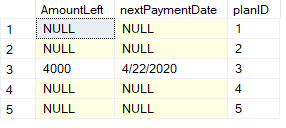
(4000, '4/22/2020', 3),

(NULL, NULL, 4),

(NULL, NULL, 5);



SELECT \* FROM PaymentPlan



**ClassRep**

DROP TABLE ClassRep;

CREATE TABLE ClassRep (

ClassRepID ClassRepID,

Name Name,

YOG YOG,

Role Role,

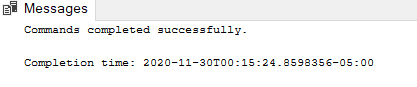
Phone Phone,

ReunionDate ReunionDate,

fundraiserID fundraiserID,

PRIMARY KEY (ClassRepID)

);



INSERT INTO ClassRep (ClassRepID, Name, YOG, Role, Phone, ReunionDate, FundraiserID) VALUES

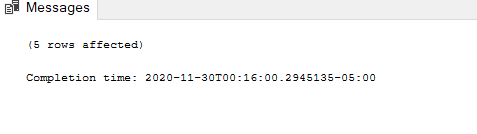
(1, 'Bea Shearle',2020, 'Graduated', '757-443-4532', '4/25/2025', 1),

(2, 'Benjamin Rosas',2015, 'Graduated', '757-223-3223', '9/5/2020', 2),

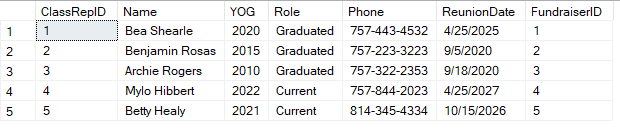
(3, 'Archie Rogers',2010, 'Graduated', '757-322-2353', '9/18/2020', 3),

(4, 'Mylo Hibbert', 2022, 'Current', '757-844-2023', '4/25/2027', 4),

(5, 'Betty Healy', 2021, 'Current', '814-345-4334', '10/15/2026', 5);



SELECT \* FROM ClassRep



**Fundraising Events**

DROP TABLE FundraisingEvents;

CREATE TABLE FundraisingEvents (

fundraiserID fundraiserID,

nameOfFundraiser nameOfFundraiser,

location location,

season season,

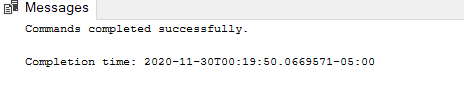
attendance attendance,

Date Date

ClassRepID ClassRepID,

PRIMARY KEY (FundraiserID)

);



INSERT INTO FundraisingEvents(FundraiserID, nameOfFundraiser, location, season, attendance, Date, volunteerID, classRepID) VALUES

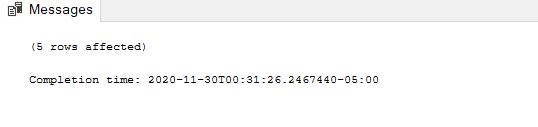
(1, 'Spring Golf Outing', 'Red Wing Lake Golf Course', 'Spring', 42, '4/6/2020', 3, 1),

(2, 'Spring Golf Outing', 'Stumpy Lake Golf Course', 'Spring', 45, '4/7/2020', 2, 2),

(3, 'Summer Pool Party', 'Hilton Ocean Front', 'Summer', 58, '7/25/2020', 5, 3),

(4, 'Fall Homecoming', 'ODU', 'Fall', 92, '10/15/2020', 1, 4),

(5, 'Fall Homecoming', 'ODU', 'Fall', 102, '10/16/2020', 4, 5);



SELECT \* FROM FundraisingEvents



**Volunteer**

CREATE TABLE Volunteer (

volunteerID volunteerID,

Email Email,

Name Name,

Address Address,

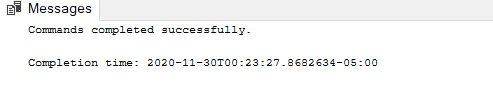
Phone Phone,

Job Job,

fundraiserID fundraiserID,

PRIMARY KEY(volunteerID)

);



INSERT INTO Volunteer (volunteerID, Email, Name, Address, Phone, Job, fundraiserID) VALUES

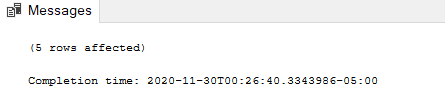
(1, 'maizieD43@gmail.com', 'Maizie Davies', '3733 Oliverio Drive', '757-233-2521', 'Concession Stand', 4),

(2, 'elizarhodes98@outlook.com', 'Eliza Rhodes', '2372 Heavner Avenue', '757-211-2332', 'Admissions', 2),

(3, 'sofiadunbar@outlook.com', 'Sofia Dunbar', '2821 Augusta Cir', '757-655-4343', 'Clean Up', 1),

(4, 'nikolashayden87@yahoo.com', 'Nikolas Hayden', '3960 Rica Drive', '757-319-3442', 'Admissions', 5),

(5, 'dominickodonnell@gmail.com', 'Dominick Odonnell', '1232 Green Cedar Ln', '757-239-0021', 'Concession Stand', 3);



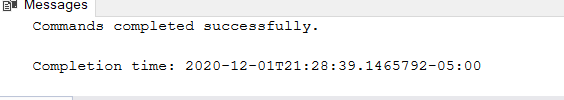
SELECT \* FROM Volunteer



**Foreign Keys**

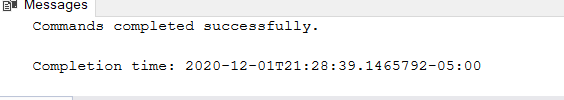
ALTER TABLE Donation

ADD CONSTRAINT fkPlanID FOREIGN KEY(planID) REFERENCES PaymentPlan(planID)



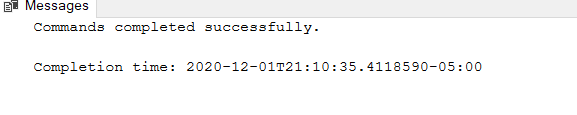
ALTER TABLE Pledge

ADD CONSTRAINT fkPledgeFID FOREIGN KEY(fundraiserID) REFERENCES FundraisingEvents(fundraiserID)



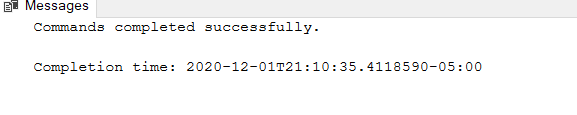
ALTER TABLE ClassRep

ADD CONSTRAINT fkClassFID FOREIGN KEY(fundraiserID) REFERENCES FundraisingEvents(fundraiserID)

****

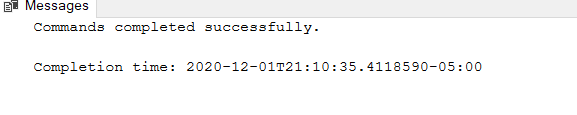
ALTER TABLE FundraisingEvents

ADD CONSTRAINT fkClassRep FOREIGN KEY(ClassRepID) REFERENCES ClassRep(ClassRepID)

****

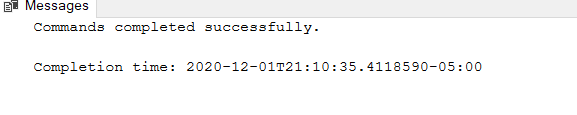
ALTER TABLE FundraisingEvents

ADD CONSTRAINT fkVolunteer FOREIGN KEY(volunteerID) REFERENCES Volunteer(volunteerID)

****

ALTER TABLE Volunteer

ADD CONSTRAINT fkVolFID FOREIGN KEY(fundraiserID) REFERENCES FundraisingEvents(fundraiserID)

****

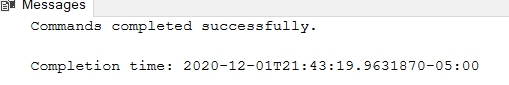
**Views**

CREATE VIEW DonorsWithAmount AS

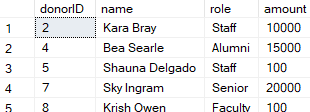
SELECT p.donorID, p.name, p.role, d.amount

FROM Donation d JOIN potentialDonor p ON d.donorID = p.donorID

WHERE amount > 0



SELECT \* FROM DonorsWithAmount

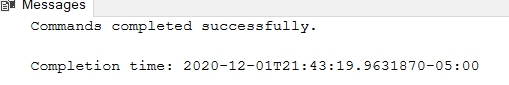


CREATE VIEW DonationAmountLeft AS

SELECT d.DonorID, d.Amount, p.planID,p.amountLeft, p.nextPaymentDate

FROM Donation d JOIN PaymentPlan p ON d.planID = p.planID

WHERE amountLeft > 0



SELECT \* FROM DonationAmountLeft

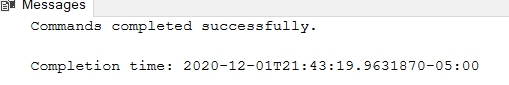


CREATE VIEW PledgesThatBecameDonations AS

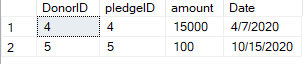
SELECT d.DonorID, p.pledgeID, p.amount, p.dayOfDonation

FROM Donation d JOIN Pledge p ON d.DonorID = p.DonorID

WHERE p.amount > 0



SELECT \* FROM PledgesThatBecameDonations

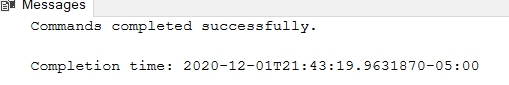


CREATE VIEW GraduatingSeniors AS

SELECT p.DonorID, p.Name, p.Role, g.Category

FROM PotentialDonor p JOIN GraduatingSenior g ON p.DonorID = g.DonorID

WHERE p.Role = 1



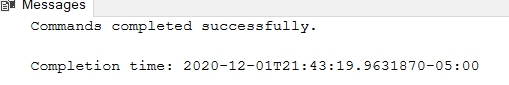
SELECT \* FROM GraduatingSeniors

CREATE VIEW WhoVolunteeredAt AS

SELECT v.volunteerID, v.name, f.fundraiserID, f.nameOfFundraiser, f.location

FROM Volunteer v JOIN FundraisingEvents f ON v.volunteerID = f.volunteerID

WHERE nameOfFundraiser = 'Spring Golf Outing'



SELECT \* FROM WhoVolunteeredAt

