

VERİ TABANI YÖNETİM SİSTEMLERİ

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Ödev - 2 Sql

PostgreSQL de ödev yapıldı.

Kodum ilk başta create table ve insertler var ondan sonra cevaplar başlıyor.

```
DROP TABLE hasta;
DROP TABLE doctor;
DROP TABLE muayene;
DROP TABLE Ilac;
DROP TABLE Recete;
DROP TABLE Receteİlac;
DROP TABLE Teshis;
DROP TABLE bolum;

CREATE TABLE hasta (
    hastaNo int NOT NULL,
    hAd VARCHAR(30),
    htel VARCHAR(15),
    hDoğumTarihi VARCHAR(30),
    hAdress VARCHAR(30),
    ortalamaMuayeneUcreti float,
    PRIMARY KEY (hastaNo)
);

CREATE TABLE doctor (
    doctorNo int NOT NULL,
    dAd VARCHAR(30),
    dTel VARCHAR(30),
    bolumNo int,
    PRIMARY KEY(doctorNo)
);

CREATE TABLE muayene(
    hastaNo int NOT NULL,
    doctorNo int NOT NULL,
    tarih VARCHAR(30) NOT NULL,
    sikayetler VARCHAR(30),
    ucret int,
    teshisNO int,
    PRIMARY KEY(hastaNo,doctorNo,tarih)
);

CREATE TABLE Ilac(
    ilacNo int NOT NULL,
    iAdi VARCHAR(30),
    iİcerik VARCHAR(30),
    ifiyat int,
    PRIMARY KEY(ilacNo)
);

CREATE TABLE Recete(
    receneNO int NOT NULL,
    rTarih VARCHAR(30),
    rUcret int,
    hastaNo int,
    doctorNo int,
    tarih VARCHAR(30),
    PRIMARY KEY(receneNO)
```

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);

CREATE TABLE Receteİlac(
    receneNO int NOT NULL,
    ilacNo int NOT NULL,
    riAdet int,
    riKullanımSekli VARCHAR(30),
    PRIMARY KEY(receneNO,ilacNo)
);

CREATE TABLE Teshis(
    teshisNO int NOT NULL,
    tAdi VARCHAR(30),
    PRIMARY KEY(teshisNO)
);

CREATE TABLE bolum(
    bolumNo int NOT NULL,
    bAdi VARCHAR(30),
    bTel VARCHAR(30),
    PRIMARY KEY(bolumNo)
);

INSERT INTO muayene (hastaNo,doctorNo,tarih,sikayetler,ucret,teshisNO)
VALUES (1,1,'01-01-22','Grip',10,1);
INSERT INTO muayene (hastaNo,doctorNo,tarih,sikayetler,ucret,teshisNO)
VALUES (1,1,'02-01-22','Aşı olma',20,1);
INSERT INTO muayene (hastaNo,doctorNo,tarih,sikayetler,ucret,teshisNO)
VALUES (1,2,'03-01-22','Baş Ağrısı',20,1);
INSERT INTO muayene (hastaNo,doctorNo,tarih,sikayetler,ucret,teshisNO)
VALUES (2,1,'01-01-22','Grip',20,2);

INSERT INTO muayene (hastaNo,doctorNo,tarih,sikayetler,ucret,teshisNO)
VALUES (1,4,'01-01-22','Grip',30,3);
INSERT INTO muayene (hastaNo,doctorNo,tarih,sikayetler,ucret,teshisNO)
VALUES (2,4,'01-01-22','Grip',50,4);
INSERT INTO muayene (hastaNo,doctorNo,tarih,sikayetler,ucret,teshisNO)
VALUES (2,4,'03-01-22','Korona',40,5);

INSERT INTO hasta (hastaNo,hAd,htel,hDoğumTarihi,hAdress)
VALUES (1,'Ayşe Kurt','0505670000','01-01-00','istanbul');
INSERT INTO hasta (hastaNo,hAd,htel,hDoğumTarihi,hAdress)
VALUES (2,'Ahmet Kaya','0505670001','01-02-00','istanbul');

INSERT INTO doctor (doctorNo,dAd,dTel,bolumNo)
VALUES (1,'Mehmet Akif','0505670002',1);
INSERT INTO doctor (doctorNo,dAd,dTel,bolumNo)
VALUES (2,'Melih Demir','0505670003',1);
INSERT INTO doctor (doctorNo,dAd,dTel,bolumNo)
VALUES (3,'Derya Demir','0505670004',2);
INSERT INTO doctor (doctorNo,dAd,dTel,bolumNo)
VALUES (4,'Ali Kurt','0505670005',2);

INSERT INTO bolum (bolumNo,bAdi,bTel)
VALUES (1,'KBB','0505670004');
INSERT INTO bolum (bolumNo,bAdi,bTel)
VALUES (2,'Çocuk Hastalıkları','0505670004');
INSERT INTO bolum (bolumNo,bAdi,bTel)
VALUES (3,'Kalp Hastalıkları','0505670004');

--Soru - 1
Update hasta
SET ortalamaMuayeneUcreti = (
    SELECT avg(ucret)
    FROM muayene
    GROUP BY hastaNo
    Having hasta.hastaNo = muayene.hastaNo

```

```

);

--Soru - 2
SELECT *
FROM hasta
WHERE NOT exists(
    SELECT *
    FROM
)

--Soru - 3
SELECT doctor.doctorNo,dAd,sayi,MuayeneUcretiToplami
FROM doctor,(
    SELECT avg(sayi) AS ortalamaSayi
    FROM (
        SELECT doctorNo,count(*) AS sayi
        FROM muayene
        GROUP BY doctorNo
    ) AS muayeneSayisi
) AS ort,
(
    SELECT doctorNo,count(*) AS sayi
    FROM muayene
    GROUP BY doctorNo
) AS muayeneSayisi,
(
    SELECT doctorNo,sum(ucret) AS MuayeneUcretiToplami
    FROM muayene
    GROUP BY doctorNo
) AS toplam
WHERE muayeneSayisi.sayi > ort.ortalamaSayi
AND doctor.doctorNo = muayeneSayisi.doctorNo
AND doctor.doctorNo = toplam.doctorNo

-- Soru - 4
SELECT DISTINCT hastaNo,doctorOrt,m.ucret
FROM muayene m,
    (SELECT doctorNo,avg(ucret) AS doctorOrt
    FROM muayene r
    GROUP BY doctorNo
    ) AS ort
WHERE m.ucret>ort.doctorOrt
AND ort.doctorNo = m.doctorNo

SELECT DISTINCT hastaNo,doctorOrt,m.ucret
FROM muayene m,
    (
        SELECT doctorNo,avg(ucret) AS doctorOrt
        FROM
        (
            (
                SELECT *
                FROM muayene
            )
            EXCEPT
            (
                SELECT *
                FROM muayene
                WHERE muayene.hastaNo=m.hastaNo
            )
        ) AS doctorfark1
        GROUP BY doctorNo
    ) AS ort
WHERE m.ucret>ort.doctorOrt
AND ort.doctorNo = m.doctorNo

--Soru -5
SELECT bolumNo,
(
    SELECT count(doctorNo)

```

```

        FROM doctor
        WHERE bolum.bolumNo = doctor.bolumNo
        GROUP BY bolum
    ) AS doctorSayisi,
    (
        SELECT avg(ucret)
        FROM muayene,doctor
        WHERE doctor.doctorNo = muayene.doctorNo
        AND bolum.bolumNo = doctor.doctorNo
        GROUP BY bolumNo
    ) AS hastamuayeneUcretOrtalamASi
FROM bolum

--Soru - 6
SELECT *
FROM hasta
WHERE hastaNo IN(
    SELECT hastaNo
    FROM muayene,doctor
    WHERE muayene.doctorNo = muayene.doctorNo
    AND doctor.dAd = 'Ali Kurt'
)

--Soru - 7
SELECT *
FROM hasta
WHERE Exists (
    SELECT *
    FROM muayene
    WHERE sikayetler='Korona'
    AND hasta.hastaNo=muayene.hastaNo
)

--Soru - 8
SELECT DISTINCT h.*
FROM hasta h, muayene m
WHERE h.hastaNo = m.hastaNo
AND m.ucret >All(
    SELECT b.ucret
    FROM hasta a, muayene b
    WHERE a.hastaNo = b.hastaNo
    AND a.hAd = 'Ayşe Kurt'
)

--Soru - 9
--A
SELECT DISTINCT bolum.* FROM doctor NATURAL INNER JOIN bolum
--B
SELECT * FROM bolum
WHERE bolumNO NOT IN (
    SELECT DISTINCT bolum.bolumno FROM doctor,bolum
    WHERE bolum.bolumno = doctor.bolumno
)
--C
SELECT *
FROM bolum
WHERE bolumno =Some(
    SELECT doctor.bolumNO
    FROM doctor
)
--D
SELECT *
FROM bolum a
WHERE Exists(
    SELECT DISTINCT bolum.*
    FROM doctor,bolum
    WHERE doctor.bolumno = bolum.bolumno
    AND a.bolumNO = bolum.bolumno
)

```

```

--Soru - 10
--A
(
    SELECT * FROM bolum
)
EXCEPT
(
    SELECT DISTINCT bolum.* FROM bolum NATURAL INNER JOIN doctor
)
--B
SELECT * FROM bolum
WHERE bolumNO NOT IN
(
    SELECT DISTINCT bolum.bolumno FROM bolum NATURAL INNER JOIN doctor
)
--C
SELECT * FROM bolum
WHERE bolumNO != All(
    SELECT DISTINCT bolum.bolumNO
    FROM doctor NATURAL INNER JOIN bolum
)
--D
SELECT r.* FROM bolum r
WHERE NOT EXISTS (
    SELECT DISTINCT bolum.*
    FROM doctor
    NATURAL INNER JOIN bolum
    WHERE r.bolumNO = doctor.bolumno
)

```





Sonuc - 1

UPDATE 2 Query returned successfully in 59 msec.

Sonuc - 2

Yapamadım.

Sonuc - 3

	doctorno [PK] integer 	dad character varying (30) 	sayi bigint 	muayeneucretitoplami bigint 
1	1	Mehmet Akif	3	50
2	4	Ali Kurt	3	130

Sonuc - 4

	hastano integer	doctorort numeric	ucret integer
1	2	43.33333333	50
2	2	16.66666666	20
3	1	16.66666666	20

Sonuc - 5

	bolumno [PK] integer	doctorsayisi bigint	hastamuayeneucretortalamasi numeric
1	1	2	16.666666666666667
2	2	2	20.0000000000000000
3	3	[null]	[null]

Sonuc - 6

	hastano [PK] integer	had character varying (30)	htel character varying (15)	hdoğumtarihi character varying (30)	hadress character varying (30)	ortalamamuayeneucreti double precision
1	1	Ayşe Kurt	0505670000	01-01-00	istanbul	15
2	2	Ahmet Kaya	0505670001	01-02-00	istanbul	20

Sonuc - 7

	hastano [PK] integer	had character varying (30)	htel character varying (15)	hdoğumtarihi character varying (30)	hadress character varying (30)	ortalamamuayeneucreti double precision
1	2	Ahmet Kaya	0505670001	01-02-00	istanbul	20




Sonuc - 8

	hastano [PK] integer	had character varying (30)	htel character varying (15)	hdoğumtarihi character varying (30)	hadress character varying (30)	ortalamamuayeneucreti double precision
1	2	Ahmet Kaya	0505670001	01-02-00	istanbul	40

Sonuc - 9

	bolumno [PK] integer	badi character varying (30)	btel character varying (30)
1	1	KBB	0505670004
2	2	Çocuk Hastalıkları	0505670004

Sonuc - 10

	bolumno [PK] integer 	badi character varying (30) 	btel character varying (30) 
1	3	Kalp Hastalıkları	0505670004