

מיני פרויקט בבסיסי נתונים

מכבי- מרפאת שיניים

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פרויקט מרפאת שיניים:

מרפאת שיניים רב תחומית, עכשווית, המציעה למטופליה מגוון טיפולים דנטליים מתקדמים מכל הסוגים, תחת קורת גג אחת, תוך הקפדה יתרה על עבודה בתנאים סטריליים מחמירים, טיפול באווירה רגועה ומתן יחס אישי לכל מטופל.

המרפאה כוללת צוות מקצועי מהשורה הראשונה, עם וותק וניסיון רב, כולל רופאים מומחים לרפואה ושיקום הפה, כירורגיה יישור שיניים (אורתודונטיה), רפואת חניכיים (פריודונטיה), טיפולי שורש ורפואת שיניים לילדים וכן יועצים מומחים מהטובים בתחומם, שינניות וסייעות וכולל מתן מענה לטיפול חירום כשאיכות הטיפול והרמה המקצועית עומדות מעל לכל.

הישויות הראשיות- צוות- צוות המרפאה שמתחלק לרופאים ולצוות המשרד לקוחות- הלקוחות הבאים למרפאה על מנת לקבוע תור ולקבל טיפול

הפעולות בתחום המרפאה-

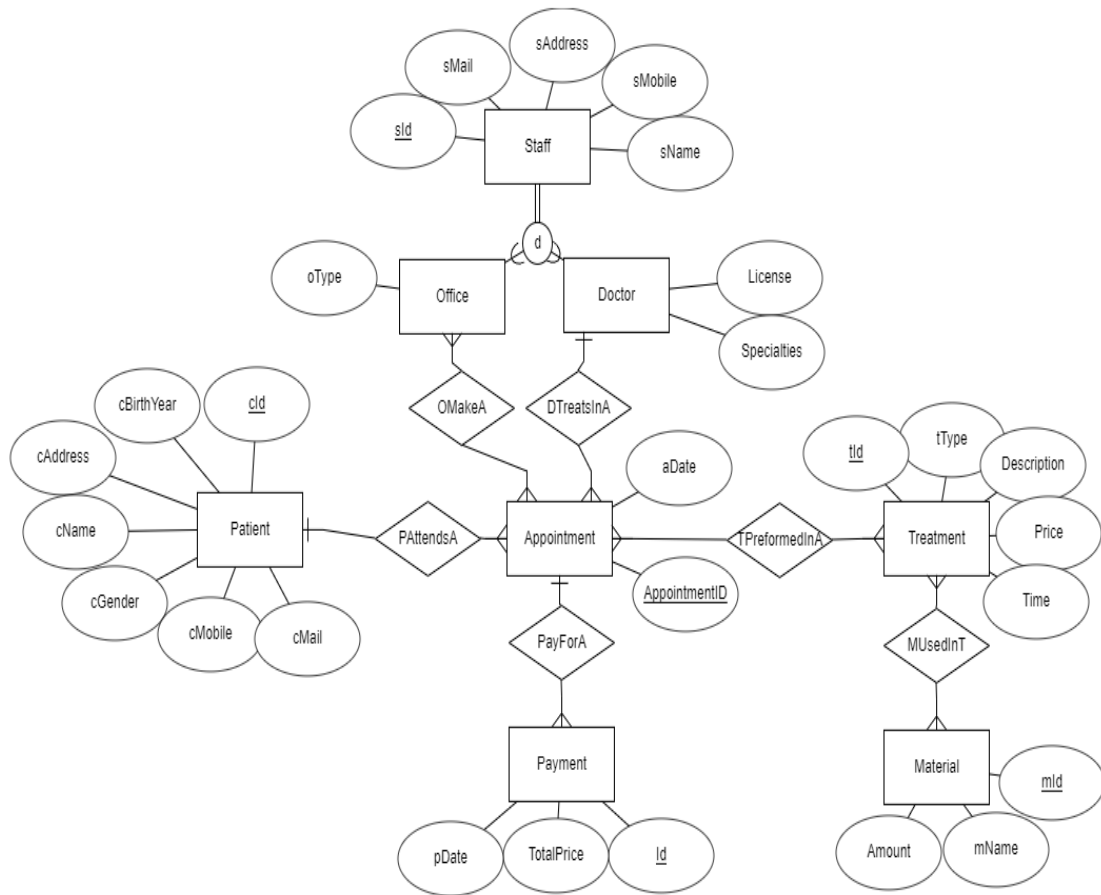
צוות המשרד יכול לקבוע ולתאם תורים עבור לקוחות,

לכל תור משויך רופא וכן נקבעים סוגי הטיפולים שיתבצעו בו, ניתן לבצע כמה בתור אחד.

עבור כל תור ניתן לשלם בכמה תשלומים וכן ניתן לשלם עבור כמה תורים בתשלום אחד.

עבור כל טיפול נקבע באילו חומרים ישתמשו

תרשים ERD



הסבר תרשימים-

פירוט ישויות:

Staff: - טבלת צוות המרפאה

| | |
|----------|--------|
| sID | ת.ז. |
| sAddress | כתובת |
| sMobile | פלאפון |
| sName | שם |
| sMail | מייל |

Doctor: - טבלת צוות הרופאים

| | |
|-------------|-------------|
| license | רישיון רופא |
| specialties | סוג התמחות |

Office:

| |
|------------------------|
| oType - סוג עובד המשרד |
|------------------------|

Treatment: - טבלת סוג הטיפול:

| | |
|-------------|----------------------|
| tID | מספר זיהוי של הטיפול |
| tType | סוג הטיפול |
| Description | תיאור הטיפול |
| Price | מחיר |
| Time | זמן הטיפול |

Appointment: - טבלת התורים

| | |
|---------------|-----------------|
| AppointmentId | מספר זיהוי לתור |
| aDate | תאריך התור |

Patient: - טבלת הלקוחות

| | |
|-------------|-------------------|
| cID | ת.ז. לקוח |
| CBirth Year | שנת לידה של הלקוח |
| cAddress | כתובת הלקוח |
| cName | שם לקוח |
| cGender | מין הלקוח |
| cMobile | פלאפון הלקוח |
| cMail | מייל הלקוח |

pPayment- טבלת התשלום

| | |
|------------|---------------------|
| ID | מספר זיהוי של העסקה |
| TotalPrice | מחיר כולל |
| pDate | תאריך העסקה |

Material- טבלת האספקה

| | |
|--------|-----------------------|
| mID | תעודת זיהוי של האספקה |
| mName | שם מוצר האספקה |
| Amount | כמות האספקה |

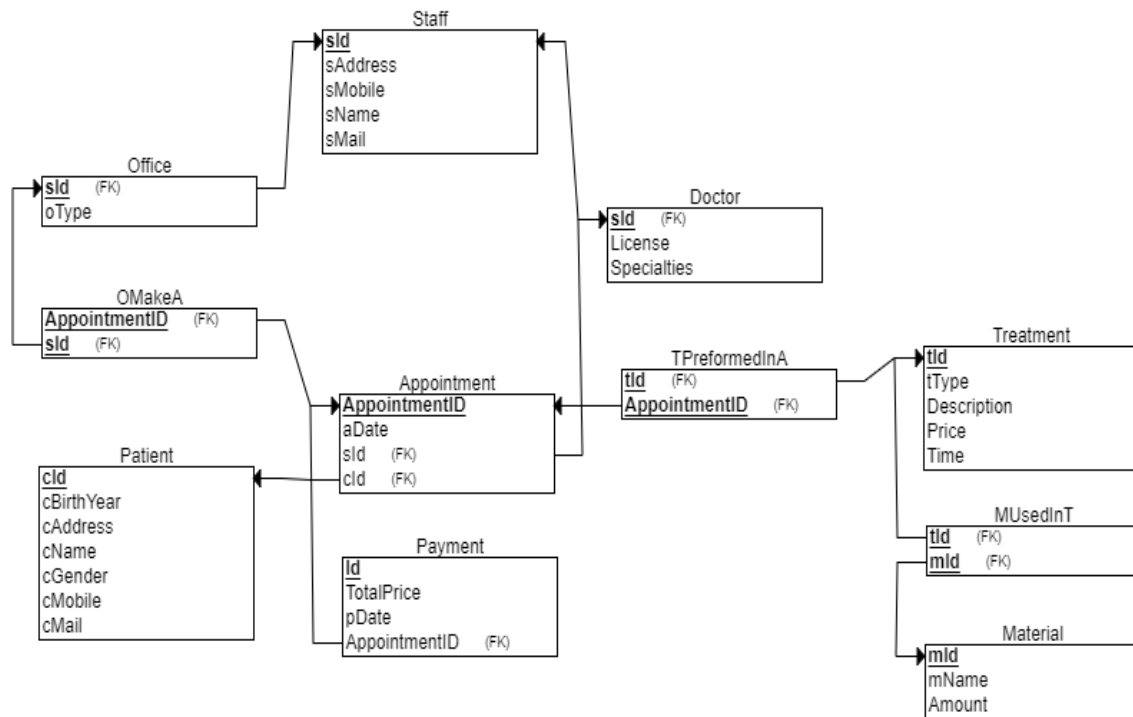
הערות כלליות-

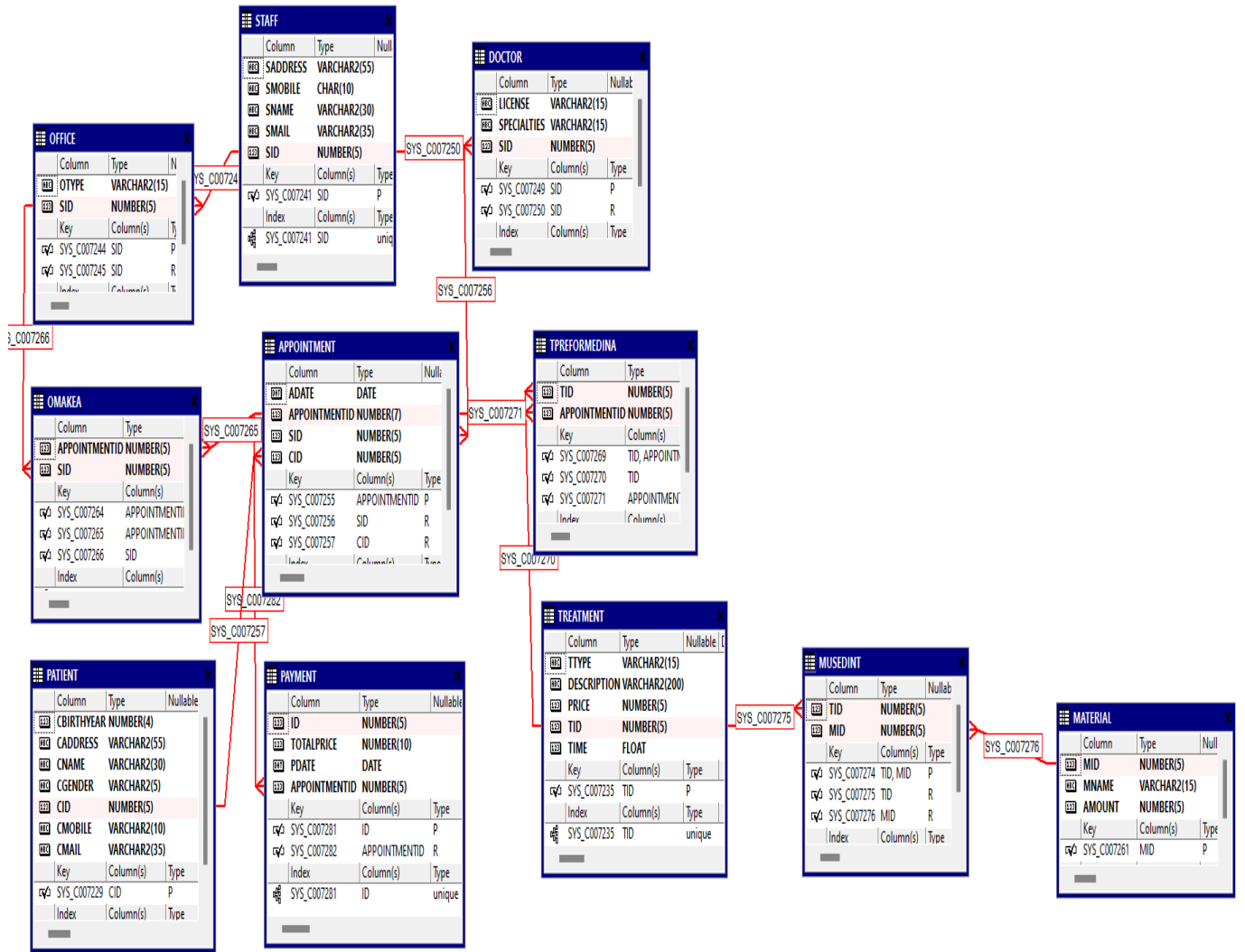
נשים לב כי מכיוון שיש ירושה לכל אדם השייך OfficeI Doctor בפועל יש תכונות נוספות כי הוא שייך גם ל Staff (ובכך עונה על התנאי של מינימום 3 תכונות. באישור המרצה)

הערות מבניות-

ה ERD מנורמלת לפי 3NF כי קודם כל אין תלויות פונקציונליות לא טריוויאליות בין המפתחות המועמדים למאפיינים שאינם מפתח בתוך כל ישות. כל מאפיין שאינו מפתח תלוי במלואו במפתח המועמד. אין תלויות מעבריות בין מאפיינים שאינם מפתח בתוך כל ישות. כל המאפיינים שאינם מפתח תלויים ישירות במפתח המועמד. הישויות מחולקות כראוי ליחידות נפרדות, ואין קבוצות חוזרות של מאפיינים.

:DSD





פקודת: create Table

CREATE TABLE Patient

)

,cBirthYear NUMERIC(4) NOT NULL

,cAddress VARCHAR(55) NOT NULL

,cName VARCHAR(30) NOT NULL

,cGender VARCHAR(5) NOT NULL

,cId NUMERIC(5) NOT NULL

,cMobile VARCHAR(10) NOT NULL

,cMail VARCHAR(35) NOT NULL

PRIMARY KEY (cId)

:(

CREATE TABLE Treatment

)

,tType VARCHAR(15) NOT NULL

,Description VARCHAR(200) NOT NULL

,Price NUMERIC(5) NOT NULL

,tId NUMERIC(5) NOT NULL

,Time FLOAT NOT NULL

PRIMARY KEY (tId)

:(

CREATE TABLE Staff

)

,sAddress VARCHAR(55) NOT NULL

,sMobile CHAR(10) NOT NULL

,sName VARCHAR(30) NOT NULL

,sMail VARCHAR(35) NOT NULL

,sId NUMERIC(5) NOT NULL

PRIMARY KEY (sId)

:(

CREATE TABLE Office

)

,oType VARCHAR(15) NOT NULL

,sId NUMERIC(5) NOT NULL

,PRIMARY KEY (sId)

FOREIGN KEY (sId) REFERENCES Staff(sId)

:(

CREATE TABLE Doctor

)

,License VARCHAR(15) NOT NULL

,Specialties VARCHAR(15) NOT NULL

,sId NUMERIC(5) NOT NULL

,PRIMARY KEY (sId)

FOREIGN KEY (sId) REFERENCES Staff(sId)

:(

CREATE TABLE Appointment

)

,aDate DATE NOT NULL

,AppointmentID NUMERIC(7) NOT NULL

,sId NUMERIC(5) NOT NULL

,cId NUMERIC(5) NOT NULL

,PRIMARY KEY (AppointmentID)
,FOREIGN KEY (sId) REFERENCES Doctor(sId)
FOREIGN KEY (cId) REFERENCES Patient(cId)

;(

CREATE TABLE Material

)

,mId NUMERIC(5) NOT NULL
,mName VARCHAR(15) NOT NULL
,Amount NUMERIC(5) NOT NULL

PRIMARY KEY (mId)

;(

CREATE TABLE OMakeA

)

,AppointmentID NUMERIC(5) NOT NULL
,sId NUMERIC(5) NOT NULL
,PRIMARY KEY (AppointmentID, sId)
,FOREIGN KEY (AppointmentID) REFERENCES Appointment(AppointmentID)
FOREIGN KEY (sId) REFERENCES Office(sId)

;(

CREATE TABLE TPreformedInA

)

,tId NUMERIC(5) NOT NULL
,AppointmentID NUMERIC(5) NOT NULL
,PRIMARY KEY (tId, AppointmentID)
,FOREIGN KEY (tId) REFERENCES Treatment(tId)

FOREIGN KEY (AppointmentID) REFERENCES Appointment(AppointmentID)

;(

CREATE TABLE MUsedInT

)

,tId NUMERIC(5) NOT NULL

,mId NUMERIC(5) NOT NULL

,PRIMARY KEY (tId, mId)

,FOREIGN KEY (tId) REFERENCES Treatment(tId)

FOREIGN KEY (mId) REFERENCES Material(mId)

;(

CREATE TABLE Payment

)

,Id NUMERIC(5) NOT NULL

,TotalPrice NUMERIC(10) NOT NULL

,pDate DATE NOT NULL

,AppointmentID NUMERIC(5) NOT NULL

,PRIMARY KEY (Id)

FOREIGN KEY (AppointmentID) REFERENCES Appointment(AppointmentID)

;(

פקודות :drop

-- Drop the Payment table first

DROP TABLE Payment;

-- Documentation: The Payment table is dropped first as per the specified order.

-- Drop the MUsedInT table next

DROP TABLE MUsedInT;

-- Documentation: The MUsedInT table is dropped next as per the specified order.

-- Drop the PreformedIn table

DROP TABLE Tpreformedina;

-- Documentation: The PreformedIn table is dropped as per the specified order.

-- Drop the OMakeA table

DROP TABLE OMakeA;

-- Documentation: The OMakeA table is dropped as per the specified order.

-- Drop the Treatment table

DROP TABLE Treatment;

-- Documentation: The Treatment table is dropped as per the specified order.

-- Drop the Material table

DROP TABLE Material;

-- Documentation: The Material table is dropped as per the specified order.

-- Drop the Appointment table

DROP TABLE Appointment;

-- Documentation: The Appointment table is dropped as per the specified order.

-- Drop the Patient table

DROP TABLE Patient;

-- Documentation: The Patient table is dropped as per the specified order.

-- Drop the Office table

DROP TABLE Office;

-- Documentation: The Office table is dropped as per the specified order.

-- Drop the Doctor table

DROP TABLE Doctor;

-- Documentation: The Doctor table is dropped as per the specified order.

-- Drop the Staff table last

DROP TABLE Staff;

-- Documentation: The Staff table is dropped last as per the specified order.

צילום מסך של הפעלת פקודת desk:

```
SQL> desc musedint
Name Type          Nullable Default Comments
-----
TID  NUMBER(5)
MID  NUMBER(5)

SQL> desc tpreformedina
Name          Type          Nullable Default Comments
-----
TID           NUMBER(5)
APPOINTMENTID NUMBER(5)

SQL> desc patient
Name          Type          Nullable Default Comments
-----
CBIRTHYEAR    NUMBER(4)
CADDRESS      VARCHAR2(55)
CNAME         VARCHAR2(30)
CGENDER       VARCHAR2(5)
CID           NUMBER(5)
CMOBILE       VARCHAR2(10)
CMAIL         VARCHAR2(35)

SQL> desc omakea
Name          Type          Nullable Default Comments
-----
APPOINTMENTID NUMBER(5)
SID           NUMBER(5)

SQL> desc payment
Name          Type          Nullable Default Comments
-----
ID            NUMBER(5)
TOTALPRICE    NUMBER(10)
PDATE        DATE
APPOINTMENTID NUMBER(5)
```

```
SQL> desc treatment
Name      Type      Nullable Default Comments
-----
TTYPE     VARCHAR2(15)
DESCRIPTION VARCHAR2(200)
PRICE     NUMBER(5)
TID       NUMBER(5)
TIME      NUMBER
```

```
SQL> desc appointment
Name      Type      Nullable Default Comments
-----
ADATE     DATE
APPOINTMENTID NUMBER(7)
SID       NUMBER(5)
CID       NUMBER(5)
```

```
SQL> desc doctor
Name      Type      Nullable Default Comments
-----
LICENSE   VARCHAR2(15)
SPECIALTIES VARCHAR2(15)
SID       NUMBER(5)
```

```
SQL> desc staff
Name      Type      Nullable Default Comments
-----
SADDRESS  VARCHAR2(55)
SMOBILE   CHAR(10)
SNAME     VARCHAR2(30)
SMAIL     VARCHAR2(35)
SID       NUMBER(5)
```

```
SQL> desc office
Name      Type      Nullable Default Comments
-----
OTYPE     VARCHAR2(15)
SID       NUMBER(5)
```

```
SQL> desc material
Name      Type      Nullable Default Comments
-----
MID       NUMBER(5)
MNAME     VARCHAR2(15)
AMOUNT    NUMBER(5)
```

קובץ :insertTable.sql

```
-- Insert data into Staff table

INSERT INTO Staff (sAddress, sMobile, sName, sMail, sId) VALUES ('123 Main St',
    '123456789', 'John Doe', 'john@email.com', 10001);

INSERT INTO Staff (sAddress, sMobile, sName, sMail, sId) VALUES ('456 Oak Ave',
    '987654321', 'Jane Smith', 'jane@email.com', 10002);

INSERT INTO Staff (sAddress, sMobile, sName, sMail, sId) VALUES ('789 Elm St',
    '456789012', 'Michael Johnson', 'michael@email.com', 10003);

INSERT INTO Staff (sAddress, sMobile, sName, sMail, sId) VALUES ('321 Pine Rd',
    '789012345', 'Emily Davis', 'emily@email.com', 10004);

INSERT INTO Staff (sAddress, sMobile, sName, sMail, sId) VALUES ('654 Maple
    Ln', '345678901', 'David Wilson', 'david@email.com', 10005);

INSERT INTO Staff (sAddress, sMobile, sName, sMail, sId) VALUES ('987 Cedar
    Blvd', '678901234', 'Sarah Thompson', 'sarah@email.com', 10006);

INSERT INTO Staff (sAddress, sMobile, sName, sMail, sId) VALUES ('246 Oak Ct',
    '901234567', 'Robert Anderson', 'robert@email.com', 10007);

INSERT INTO Staff (sAddress, sMobile, sName, sMail, sId) VALUES ('579 Elm
    Way', '234567890', 'Jessica Taylor', 'jessica@email.com', 10008);

INSERT INTO Staff (sAddress, sMobile, sName, sMail, sId) VALUES ('813 Pine
    Ave', '567890123', 'Chris Brown', 'chris@email.com', 10009);

INSERT INTO Staff (sAddress, sMobile, sName, sMail, sId) VALUES ('159 Maple
    St', '890123456', 'Amanda Garcia', 'amanda@email.com', 10010);

INSERT INTO Staff (sAddress, sMobile, sName, sMail, sId) VALUES ('101 Birch St',
    '234123456', 'Oliver Martin', 'oliver@email.com', 10011);

INSERT INTO Staff (sAddress, sMobile, sName, sMail, sId) VALUES ('202 Spruce
    Ln', '567234567', 'Sophia Lee', 'sophia@email.com', 10012);

INSERT INTO Staff (sAddress, sMobile, sName, sMail, sId) VALUES ('303 Cherry
    Ave', '890345678', 'Liam Martinez', 'liam@email.com', 10013);

INSERT INTO Staff (sAddress, sMobile, sName, sMail, sId) VALUES ('404 Willow
    Rd', '123456789', 'Mia Rodriguez', 'mia@email.com', 10014);
```

```

INSERT INTO Staff (sAddress, sMobile, sName, sMail, sId) VALUES ('505 Poplar
                        St', '234567890', 'Noah Davis', 'noah@email.com', 10015);

INSERT INTO Staff (sAddress, sMobile, sName, sMail, sId) VALUES ('606 Aspen
                        Ct', '345678901', 'Isabella Lewis', 'isabella@email.com', 10016);

INSERT INTO Staff (sAddress, sMobile, sName, sMail, sId) VALUES ('707 Beech
                        Blvd', '456789012', 'James White', 'james@email.com', 10017);

INSERT INTO Staff (sAddress, sMobile, sName, sMail, sId) VALUES ('88 Magnolia
                        Way', '567890123', 'Charl Walker', 'charlotte@email.com', 10018);

INSERT INTO Staff (sAddress, sMobile, sName, sMail, sId) VALUES ('909 Oak Dr',
                        '678901234', 'Ben Hall', 'benjamin@email.com', 10019);

                        INSERT INTO Staff (sAddress, sMobile, sName, sMail, sId) VALUES ('100
                        Redwood Ave', '789012345', 'Amelia Young', 'amelia@email.com', 10020);

                        --select * from Staff;

                        -- Insert data into Doctor table

INSERT INTO Doctor (License, Specialties, sId) VALUES ('L1234', 'Orthodontist',
                        10001);

INSERT INTO Doctor (License, Specialties, sId) VALUES ('L5678', 'Cosmetic',
                        10002);

INSERT INTO Doctor (License, Specialties, sId) VALUES ('L9012', 'Dentist', 10003);
INSERT INTO Doctor (License, Specialties, sId) VALUES ('L3456', 'Dentist', 10004);
INSERT INTO Doctor (License, Specialties, sId) VALUES ('L7890', 'Cosmetic',
                        10005);

INSERT INTO Doctor (License, Specialties, sId) VALUES ('L2345', 'Dentist', 10006);
INSERT INTO Doctor (License, Specialties, sId) VALUES ('L6789', 'Dentist', 10007);
INSERT INTO Doctor (License, Specialties, sId) VALUES ('L0123', 'Orthodontist',
                        10008);

INSERT INTO Doctor (License, Specialties, sId) VALUES ('L4567', 'Orthodontist',
                        10009);

INSERT INTO Doctor (License, Specialties, sId) VALUES ('L8901', 'Dentist', 10010);

                        --select * from Doctor;

```

-- Insert data into Office table

INSERT INTO Office (oType, sld) VALUES ('Secretariat', 10011);

INSERT INTO Office (oType, sld) VALUES ('Sales', 10012);

INSERT INTO Office (oType, sld) VALUES ('Secretariat', 10013);

INSERT INTO Office (oType, sld) VALUES ('Sales', 10014);

INSERT INTO Office (oType, sld) VALUES ('Secretariat', 10015);

INSERT INTO Office (oType, sld) VALUES ('Secretariat', 10016);

INSERT INTO Office (oType, sld) VALUES ('Sales', 10017);

INSERT INTO Office (oType, sld) VALUES ('Shift Manager', 10018);

INSERT INTO Office (oType, sld) VALUES ('Shift Manager', 10019);

INSERT INTO Office (oType, sld) VALUES ('Sales', 10020);

--select * from Office;

-- Insert data into Patient table

INSERT INTO Patient (cBirthYear, cAddress, cName, cGender, cld, cMobile, cMail) VALUES (1980, '123 Main St', 'Alice Johnson', 'F', 20001, '123456789', 'alice@email.com');

INSERT INTO Patient (cBirthYear, cAddress, cName, cGender, cld, cMobile, cMail) VALUES (1990, '456 Oak Ave', 'Bob Smith', 'M', 20002, '987654321', 'bob@email.com');

INSERT INTO Patient (cBirthYear, cAddress, cName, cGender, cld, cMobile, cMail) VALUES (1985, '789 Elm St', 'Charlie Davis', 'M', 20003, '456789012', 'charlie@email.com');

INSERT INTO Patient (cBirthYear, cAddress, cName, cGender, cld, cMobile, cMail) VALUES (1995, '321 Pine Rd', 'Danielle Wilson', 'F', 20004, '789012345', 'danielle@email.com');

INSERT INTO Patient (cBirthYear, cAddress, cName, cGender, cld, cMobile, cMail) VALUES (1988, '654 Maple Ln', 'Evan Thompson', 'M', 20005, '345678901', 'evan@email.com');

INSERT INTO Patient (cBirthYear, cAddress, cName, cGender, cId, cMobile, cMail) VALUES (1992, '987 Cedar Blvd', 'Fiona Anderson', 'F', 20006, '678901234', 'fiona@email.com');

INSERT INTO Patient (cBirthYear, cAddress, cName, cGender, cId, cMobile, cMail) VALUES (1982, '246 Oak Ct', 'George Taylor', 'M', 20007, '901234567', 'george@email.com');

INSERT INTO Patient (cBirthYear, cAddress, cName, cGender, cId, cMobile, cMail) VALUES (1998, '579 Elm Way', 'Hannah Brown', 'F', 20008, '234567890', 'hannah@email.com');

INSERT INTO Patient (cBirthYear, cAddress, cName, cGender, cId, cMobile, cMail) VALUES (1991, '813 Pine Ave', 'Ian Garcia', 'M', 20009, '567890123', 'ian@email.com');

INSERT INTO Patient (cBirthYear, cAddress, cName, cGender, cId, cMobile, cMail) VALUES (1987, '159 Maple St', 'Jill Roberts', 'F', 20010, '890123456', 'jill@email.com');

--select * from Patient;

-- Insert data into Appointment table

INSERT INTO Appointment (aDate, AppointmentID, sId, cId) VALUES (TO_DATE('01-05-2023', 'DD-MM-YYYY'), 30001, 10001, 20001);

INSERT INTO Appointment (aDate, AppointmentID, sId, cId) VALUES (TO_DATE('02-05-2023', 'DD-MM-YYYY'), 30002, 10006, 20002);

INSERT INTO Appointment (aDate, AppointmentID, sId, cId) VALUES (TO_DATE('03-05-2023', 'DD-MM-YYYY'), 30003, 10006, 20003);

INSERT INTO Appointment (aDate, AppointmentID, sId, cId) VALUES (TO_DATE('04-05-2023', 'DD-MM-YYYY'), 30004, 10001, 20004);

INSERT INTO Appointment (aDate, AppointmentID, sId, cId) VALUES (TO_DATE('05-05-2023', 'DD-MM-YYYY'), 30005, 10005, 20005);

INSERT INTO Appointment (aDate, AppointmentID, sId, cId) VALUES (TO_DATE('06-05-2023', 'DD-MM-YYYY'), 30006, 10006, 20006);

--select * from Appointment;

-- Insert data into Payment table

INSERT INTO Payment (Id, TotalPrice, pDate, AppointmentID) VALUES (40001,
100.00, TO_DATE('01-05-2023', 'DD-MM-YYYY'), 30001);

INSERT INTO Payment (Id, TotalPrice, pDate, AppointmentID) VALUES (40002,
150.50, TO_DATE('02-05-2023', 'DD-MM-YYYY'), 30002);

INSERT INTO Payment (Id, TotalPrice, pDate, AppointmentID) VALUES (40003,
75.25, TO_DATE('03-05-2023', 'DD-MM-YYYY'), 30003);

INSERT INTO Payment (Id, TotalPrice, pDate, AppointmentID) VALUES (40004,
200.00, TO_DATE('04-05-2023', 'DD-MM-YYYY'), 30004);

INSERT INTO Payment (Id, TotalPrice, pDate, AppointmentID) VALUES (40005,
125.75, TO_DATE('05-05-2023', 'DD-MM-YYYY'), 30005);

INSERT INTO Payment (Id, TotalPrice, pDate, AppointmentID) VALUES (40006,
175.50, TO_DATE('06-05-2023', 'DD-MM-YYYY'), 30006);

--select * from Payment;

-- Insert data into Material table

INSERT INTO Material (mId, mName, Amount) VALUES (50001,'Gauze',100);

INSERT INTO Material (mId, mName, Amount) VALUES (50002,'Bandages',75);

INSERT INTO Material (mId, mName, Amount) VALUES (50003,'Syringes',200);

INSERT INTO Material (mId, mName, Amount) VALUES (50004,'Scalpels',50);

INSERT INTO Material (mId, mName, Amount) VALUES (50005,'Gloves',300);

INSERT INTO Material (mId, mName, Amount) VALUES (50006,'Sutures',125);

INSERT INTO Material (mId, mName, Amount) VALUES (50007,'Cotton
Swabs',400);

INSERT INTO Material (mId, mName, Amount) VALUES (50008,'Disinfectant',150);

INSERT INTO Material (mId, mName, Amount) VALUES
(50009,'Thermometers',75);

INSERT INTO Material (mId, mName, Amount) VALUES
(50010,'Stethoscopes',25);

--select * from Material;

-- Insert data into Treatment table

INSERT INTO Treatment (tType, Description, Price, tId, Time) VALUES
('Surgery','Appendectomy',10000,60001,2.5);

INSERT INTO Treatment (tType, Description, Price, tId, Time) VALUES
('Medication','Antibiotics',50,60002,0.5);

INSERT INTO Treatment (tType, Description, Price, tId, Time) VALUES
('Therapy','Physical Therapy',100,60003,1.0);

INSERT INTO Treatment (tType, Description, Price, tId, Time) VALUES
('Procedure','X-Ray',200,60004,0.25);

INSERT INTO Treatment (tType, Description, Price, tId, Time) VALUES
('Surgery','Knee Replacement',15000,60005,3.0);

INSERT INTO Treatment (tType, Description, Price, tId, Time) VALUES
('Medication','Pain Relievers',25,60006,0.25);

--select * from Treatment;

קובץ :SelectAll.sql

-- Select all from Doctor table

Select * from Doctor; -- Retrieves all doctor records

-- Select all from Patient table

Select * from Patient; -- Retrieves all patient records

-- Select all from Appointment table

Select * from Appointment; -- Retrieves all appointment records

-- Select all from Payment table

Select * from Payment; -- Retrieves all payment records

-- Select all from Staff table

Select * from Staff; -- Retrieves all staff records (corrected from "Staff")

-- Select all from MusedinT table

Select * from MusedinT; -- Retrieves records from MusedinT table
(materials/treatments used)

-- Select all from Treatment table

Select * from Treatment; -- Retrieves all treatment records

-- Select all from Material table

Select * from Material; -- Retrieves all material records

-- Select all from TperformedInA table

Select * from Tpreformedina; -- Retrieves records from TperformedInA table
(treatments and appointments)

-- Select all from OMakeA table

Select * from OMakeA; -- Retrieves records from OMakeA table (offices and
appointments)

-- For each Select - Checking the number of rows in the table

Select count(*) from Office;

Select count(*) from Doctor;

Select count(*) from Patient;

Select count(*) from Appointment;

Select count(*) from Payment;

Select count(*) from Staff;

Select count(*) from MusedinT;

Select count(*) from Treatment;

Select count(*) from Material;

Select count(*) from Tpreformedina;

Select count(*) from OMakeA;

שיטות הכנסת data:

שיטה 1:

Data generator

הכנסה לטבלה Appointment:

| APPOINTMENT | | | | | |
|---------------|--------|-------------|--------------------------------|-----|--------|
| Owner | | Table | Number of records | | |
| SYSTEM | | APPOINTMENT | 400 | | |
| Name | Type | Size | Data | | Master |
| ADATE | DATE | | Random(01/01/2024, 01/01/2030) | YES | |
| APPOINTMENTID | NUMBER | 7 | [11111] | YES | |
| SID | NUMBER | 5 | List(select SID from doctor) | YES | |
| CID | NUMBER | 5 | List(select CID from patient) | YES | |

| ADATE | APPOINTMENTID | SID | CID |
|------------|---------------|-------|-------|
| 16.12.2028 | 13486 | 10001 | 759 |
| 21.12.2027 | 29763 | 10007 | 715 |
| 19.12.2024 | 87464 | 27182 | 610 |
| 13.07.2024 | 86374 | 81384 | 135 |
| 07.10.2029 | 85248 | 39663 | 149 |
| 05.11.2027 | 33423 | 65613 | 668 |
| 17.01.2028 | 91451 | 68229 | 774 |
| 12.03.2028 | 54837 | 25022 | 363 |
| 14.06.2029 | 35641 | 45148 | 418 |
| 01.07.2027 | 96185 | 10004 | 431 |
| 28.01.2028 | 82742 | 10010 | 343 |
| 03.12.2026 | 87894 | 51872 | 584 |
| 27.01.2026 | 37462 | 13794 | 785 |
| 12.07.2026 | 88145 | 86842 | 180 |
| 21.04.2027 | 12897 | 13227 | 654 |
| 12.11.2024 | 17627 | 21570 | 453 |
| 06.12.2024 | 38581 | 86286 | 274 |
| 19.08.2024 | 43785 | 11680 | 647 |
| 28.01.2025 | 22749 | 21996 | 445 |
| 08.04.2026 | 68843 | 10003 | 410 |
| 01.06.2028 | 16498 | 11630 | 841 |
| 08.08.2027 | 54216 | 72073 | 952 |
| 30.10.2029 | 99782 | 34609 | 553 |
| 18.06.2029 | 18154 | 77008 | 562 |
| 04.01.2024 | 27877 | 90716 | 930 |
| 23.04.2029 | 73779 | 91538 | 975 |
| 04.02.2029 | 84624 | 17595 | 980 |
| 16.11.2026 | 82863 | 51534 | 672 |
| 16.04.2026 | 43347 | 33532 | 832 |
| 30.09.2029 | 21482 | 99939 | 20009 |
| 30.06.2025 | 12898 | 92442 | 218 |
| 13.01.2029 | 78926 | 32387 | 332 |
| 05.12.2028 | 54488 | 22236 | 832 |
| 21.12.2028 | 61398 | 38187 | 292 |
| 30.09.2024 | 18259 | 61435 | 556 |
| 20.07.2028 | 46565 | 47507 | 689 |
| 08.09.2028 | 77515 | 10011 | 127 |
| 24.02.2027 | 12375 | 69221 | 468 |
| 01.09.2029 | 38615 | 68229 | 690 |

Definition Options Result

SYSTEM@XE Generated in 0.047 seconds. 1 table(s) with 400 rows.

SQL Output Statistics

```
select * from appointment
```

| | ADATE | APPOINTMENTID | SID | CID |
|----|--------------|---------------|-------|-------|
| 1 | 24/09/2024 * | 23487 | 22236 | 984 |
| 2 | 08/01/2025 * | 79857 | 51872 | 140 |
| 3 | 02/03/2027 * | 34432 | 10012 | 104 |
| 4 | 27/08/2027 * | 85761 | 34941 | 362 |
| 5 | 26/02/2025 * | 82511 | 46150 | 690 |
| 6 | 26/12/2029 * | 48971 | 59568 | 980 |
| 7 | 01/05/2023 * | 30001 | 10001 | 20001 |
| 8 | 02/05/2023 * | 30002 | 10006 | 20002 |
| 9 | 03/05/2023 * | 30003 | 10006 | 20003 |
| 10 | 04/05/2023 * | 30004 | 10001 | 20004 |
| 11 | 05/05/2023 * | 30005 | 10005 | 20005 |
| 12 | 06/05/2023 * | 30006 | 10006 | 20006 |
| 13 | 05/03/2028 * | 71834 | 18936 | 501 |
| 14 | 09/12/2026 * | 25165 | 57567 | 829 |
| 15 | 01/07/2025 * | 39772 | 76380 | 434 |
| 16 | 20/04/2025 * | 73199 | 79819 | 783 |
| 17 | 02/08/2025 * | 96566 | 79274 | 601 |
| 18 | 08/05/2028 * | 44578 | 10002 | 736 |
| 19 | 08/09/2028 * | 38457 | 74548 | 803 |
| 20 | 25/06/2026 * | 35792 | 54635 | 178 |
| 21 | 30/06/2029 * | 29532 | 10652 | 475 |
| 22 | 28/10/2029 * | 54399 | 63961 | 799 |
| 23 | 27/09/2025 * | 31716 | 10009 | 874 |
| 24 | 16/11/2028 * | 22348 | 27379 | 567 |
| 25 | 02/11/2026 * | 62227 | 63036 | 513 |
| 26 | 17/02/2027 * | 97354 | 21570 | 736 |
| 27 | 06/07/2026 * | 37916 | 51524 | 903 |
| 28 | 08/08/2025 * | 64188 | 86483 | 382 |
| 29 | 27/05/2029 * | 74732 | 11830 | 391 |
| 30 | 21/11/2025 * | 24137 | 27192 | 941 |
| 31 | 16/09/2029 * | 39616 | 31845 | 633 |
| 32 | 12/12/2025 * | 17879 | 99789 | 552 |
| 33 | 22/10/2025 * | 99822 | 61696 | 198 |
| 34 | 24/07/2029 * | 16437 | 10013 | 839 |
| 35 | 18/11/2028 * | 66153 | 86483 | 778 |
| 36 | 18/07/2024 * | 96148 | 10007 | 259 |
| 37 | 13/07/2029 * | 55657 | 39306 | 250 |
| 38 | 16/06/2027 * | 55127 | 69468 | 568 |
| 39 | 02/06/2024 * | 43974 | 94992 | 800 |

1:26 SYSTEM@XE 405 rows selected in 0.249 seconds

הכנסה לטבלה DOCTOR:

DOCTOR

| Owner | Table | Number of records |
|--------|--------|-------------------|
| SYSTEM | DOCTOR | 200 |

| Name | Type | Size | Data | Master |
|-------------|----------|------|---|--------|
| LICENSE | VARCHAR2 | 15 | [A000000] | |
| SPECIALTIES | VARCHAR2 | 15 | List('Dentist','Cosmetic','Orthodontist') | |
| SID | NUMBER | 5 | List(select SID from STAFF) | |

DOCTOR

| LICENSE | SPECIALTIES | SID |
|----------|--------------|-------|
| R217834 | Orthodontist | 82187 |
| X147735 | Cosmetic | 44023 |
| V115095 | Dentist | 49669 |
| W177145 | Cosmetic | 83211 |
| H548247 | Dentist | 19671 |
| J970641 | Dentist | 43702 |
| R260982 | Orthodontist | 59096 |
| U600580 | Dentist | 61039 |
| M632541 | Orthodontist | 89219 |
| V507144 | Dentist | 91680 |
| Z327823 | Cosmetic | 10709 |
| D106008 | Cosmetic | 56476 |
| T032986 | Cosmetic | 34002 |
| P841679 | Orthodontist | 51881 |
| W746714 | Orthodontist | 15227 |
| H4995140 | Orthodontist | 53162 |
| C579087 | Dentist | 40041 |
| G5995427 | Dentist | 13416 |
| A407082 | Dentist | 41128 |
| R215464 | Orthodontist | 55269 |
| V694358 | Orthodontist | 39663 |
| C775618 | Dentist | 55149 |
| B016507 | Orthodontist | 51748 |
| T889992 | Cosmetic | 48188 |
| O523237 | Cosmetic | 27192 |
| T197568 | Cosmetic | 97879 |
| Y989354 | Dentist | 51524 |
| P083161 | Dentist | 71870 |
| B726055 | Cosmetic | 47962 |
| O660739 | Dentist | 70250 |
| S999963 | Cosmetic | 11511 |
| C624881 | Dentist | 40705 |
| O551012 | Cosmetic | 45109 |
| N731794 | Orthodontist | 27991 |
| L353466 | Orthodontist | 70462 |
| S999631 | Cosmetic | 98750 |
| O527631 | Dentist | 76479 |
| M278879 | Orthodontist | 61696 |
| W691773 | Dentist | 88762 |

Definition Options Result

SYSTEM@XE Generated in 0.031 seconds. 1 table(s) with 200 rows.

SQL Output Statistics

select * from doctors

| | id | name | specialties | id |
|----|----------|--------------|-------------|----|
| 1 | 1234 | Orthodontist | 10001 | |
| 2 | 13678 | Cosmetic | 10002 | |
| 3 | 1812 | Dentist | 10003 | |
| 4 | 13456 | Dentist | 10004 | |
| 5 | 17890 | Cosmetic | 10005 | |
| 6 | 12452 | Dentist | 10006 | |
| 7 | 18789 | Dentist | 10007 | |
| 8 | 12123 | Orthodontist | 10008 | |
| 9 | 14567 | Orthodontist | 10009 | |
| 10 | 18901 | Dentist | 10010 | |
| 11 | 14709890 | Cosmetic | 10011 | |
| 12 | 179888 | Orthodontist | 10012 | |
| 13 | 1853201 | Orthodontist | 10013 | |
| 14 | 198303 | Dentist | 10014 | |
| 15 | 1807115 | Orthodontist | 10015 | |
| 16 | 1797829 | Orthodontist | 10016 | |
| 17 | 1828703 | Dentist | 10017 | |
| 18 | 1603052 | Orthodontist | 10018 | |
| 19 | 177068 | Cosmetic | 10019 | |
| 20 | 170510 | Orthodontist | 10020 | |
| 21 | 1940515 | Orthodontist | 10021 | |
| 22 | 188842 | Cosmetic | 10022 | |
| 23 | 198902 | Cosmetic | 10023 | |
| 24 | 1887703 | Orthodontist | 10024 | |
| 25 | 1847487 | Dentist | 10025 | |
| 26 | 1888888 | Dentist | 10026 | |
| 27 | 1806145 | Cosmetic | 10027 | |
| 28 | 1768493 | Orthodontist | 10028 | |
| 29 | 1908205 | Cosmetic | 10029 | |
| 30 | 1803396 | Orthodontist | 10030 | |
| 31 | 1676321 | Orthodontist | 10031 | |
| 32 | 182892 | Cosmetic | 10032 | |
| 33 | 1848123 | Orthodontist | 10033 | |
| 34 | 1808487 | Orthodontist | 10034 | |
| 35 | 188388 | Cosmetic | 10035 | |
| 36 | 1512483 | Orthodontist | 10036 | |
| 37 | 1918751 | Cosmetic | 10037 | |
| 38 | 1862872 | Orthodontist | 10038 | |
| 39 | 1702043 | Cosmetic | 10039 | |

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SYSTEM@XE license, varchar(10), mandatory

הכנסה לטבלה Material:

| MATERIAL | | |
|----------|------------------|--------|
| MID | MNAME | AMOUNT |
| 74716 | Anesthetic Push | 175 |
| 48826 | Anesthetic Emcz | 37 |
| 54383 | Anesthetic Roys | 141 |
| 36681 | Antibiotic Jyzz | 120 |
| 19478 | Septanest Mmha | 8 |
| 23314 | Septanest Dyemf | 219 |
| 57353 | Pills Zuqoqb | 6 |
| 42232 | Ointment Ctvbvc | 94 |
| 63934 | Septanest Bamsl | 192 |
| 53564 | Anesthetic Zkss | 113 |
| 78293 | Antibiotic Mlaj | 71 |
| 57648 | Antibiotic Lenm | 219 |
| 57655 | Septanest Ccipc | 126 |
| 89847 | Ointment Mstmvl | 81 |
| 68235 | Septanest Izepr | 105 |
| 66981 | Septanest Dtlkg | 28 |
| 99943 | Antibiotic Yooe | 3 |
| 85727 | Ointment Atruvd | 195 |
| 53718 | Septanest Mlgeyy | 55 |
| 41993 | Pills Nlsrar | 29 |
| 90837 | Antibiotic Maza | 68 |
| 55993 | Pills Ofkeqj | 245 |
| 94795 | Anesthetic Qcms | 5 |
| 69546 | Septanest Rrojoy | 27 |
| 52584 | Septanest Ewnra | 11 |
| 77373 | Pills Jbbncl | 156 |
| 19777 | Ointment Yfajna | 175 |
| 48969 | Pills Qupklj | 13 |
| 18611 | Pills Nshbag | 143 |
| 13383 | Ointment Fugwof | 17 |
| 39962 | Ointment Hsdmib | 162 |
| 17462 | Ointment Tkybyd | 226 |
| 24514 | Anesthetic Dido | 77 |
| 32875 | Pills Nsqens | 224 |
| 75879 | Antibiotic Lnnml | 145 |
| 37447 | Pills Dtdldq | 37 |
| 37564 | Pills Lgyrcn | 186 |
| 29917 | Antibiotic Droe | 67 |
| 79575 | Pills Ebdkrx | 130 |

Definition Options Result

SYSTEM@XE Generated in 0.046 seconds. 1 table(s) with 400 rows.

Owner: SYSTEM Table: MATERIAL Number of records: 400

| Name | Type | Size | Data | Master |
|--------|----------|------|---|--------|
| MID | NUMBER | 5 | [11111] | |
| MNAME | VARCHAR2 | 15 | List('Antibiotic','Anesthetic','Pills','Ointment','Septanest') + '-' + [Aaaaaa] | |
| AMOUNT | NUMBER | 5 | Random(1,250) | |

Definition Options Result

Generated in 0 seconds: 1 table(s) with 17 rows.

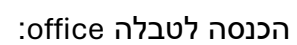
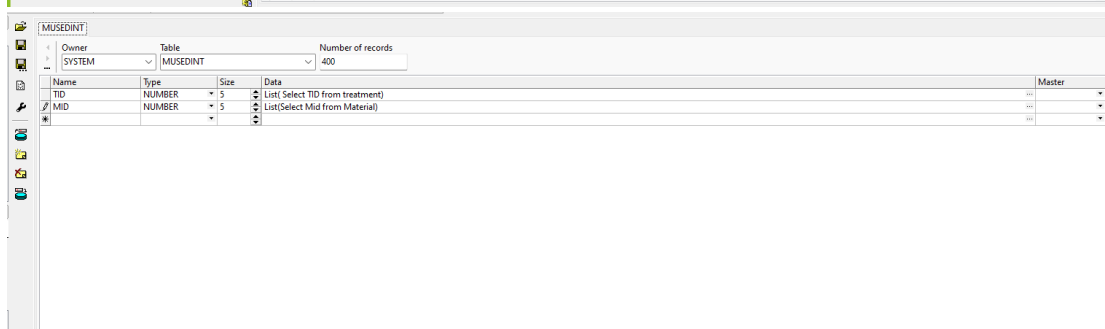
SQL Output Statistics

```
select * from MATERIAL
```

| | MID | MNAME | AMOUNT |
|-----|-------|-----------------|--------|
| 179 | 51142 | Anesthetic Qbnk | 187 |
| 180 | 13449 | Ointment Fmctqu | 249 |
| 181 | 96364 | Anesthetic Xsgu | 45 |
| 182 | 74315 | Pills Qxgbd | 199 |
| 183 | 32992 | Septanest Ljztg | 5 |
| 184 | 83936 | Antibiotic Myjy | 5 |
| 185 | 44631 | Ointment Fpbfd | 250 |
| 186 | 91849 | Septanest Oenyr | 90 |
| 187 | 63651 | Anesthetic Numh | 89 |
| 188 | 53673 | Septanest Vugtw | 203 |
| 189 | 95165 | Septanest Ttoke | 78 |
| 190 | 54674 | Septanest Ogvpn | 13 |
| 191 | 29138 | Antibiotic Vsmr | 81 |
| 192 | 56631 | Ointment Aziql | 169 |
| 193 | 15199 | Antibiotic Wcgq | 104 |
| 194 | 94219 | Anesthetic Qrjk | 51 |
| 195 | 41311 | Anesthetic Gxjv | 206 |
| 196 | 68746 | Anesthetic Bbge | 47 |
| 197 | 11323 | Antibiotic Yeek | 182 |
| 198 | 34646 | Ointment Drlrcp | 232 |
| 199 | 75214 | Pills Axbsrh | 97 |
| 200 | 62615 | Antibiotic Jkxt | 137 |
| 201 | 22792 | Pills Qhjijs | 74 |

1:23 SYSTEM@XE 439 rows selected in 0.202 seconds

הכנסה לטבלת Musedint:



SQL Output Statistics

```
select * from OFFICE
```

| OTYPE | SID |
|-------|------------------|
| 1 | Secretariat |
| 2 | Sales |
| 3 | Secretariat |
| 4 | Sales |
| 5 | Secretariat |
| 6 | Secretariat |
| 7 | Sales |
| 8 | Shift Manager |
| 9 | Shift Manager |
| 10 | Sales |
| 11 | Shift Manager |
| 12 | Sales |
| 13 | Customer Service |
| 14 | Secretariat |
| 15 | Shift Manager |
| 16 | Secretariat |
| 17 | Secretariat |
| 18 | Shift Manager |
| 19 | Sales |
| 20 | Secretariat |
| 21 | Secretariat |
| 22 | Customer Service |
| 23 | Secretariat |
| 24 | Shift Manager |
| 25 | Secretariat |
| 26 | Shift Manager |
| 27 | Customer Service |
| 28 | Counter |
| 29 | Secretariat |
| 30 | Secretariat |
| 31 | Secretariat |
| 32 | IT |
| 33 | Counter |
| 34 | Shift Manager |
| 35 | Sales |
| 36 | Counter |
| 37 | Customer Service |
| 38 | Secretariat |
| 39 | Customer Service |

SYSTEM@XE 278 rows selected in 0.233 seconds

OFFICE

| Name | Type | Size | Data | Master |
|-------|----------|------|---|--------|
| OTYPE | VARCHAR2 | 15 | List(Shift Manager,'Sales Secretariat','Counter','Customer Service','IT') | |
| SID | NUMBER | 5 | List(Select SID from staff) | |

Generated in 0.031 seconds. 1 table(s) with 400 rows.

PL/SQL Developer - SYSTEM@XE - [Data Generator - New]

Connections

Objects

Window List

SQL Window - select * from office

Data Generator - New

| OTYPE | SID |
|------------------|-------|
| Shift Manager | 40130 |
| Customer Service | 18861 |
| IT | 17595 |
| Shift Manager | 83811 |
| Shift Manager | 27019 |
| IT | 98187 |
| IT | 16712 |
| Customer Service | 23955 |
| Sales | 28516 |
| Counter | 13343 |
| IT | 47027 |
| IT | 40049 |
| IT | 55777 |
| Shift Manager | 29543 |
| Sales | 73315 |
| Counter | 45377 |
| Counter | 42679 |
| Secretariat | 15963 |
| IT | 10013 |
| IT | 15962 |
| Shift Manager | 53162 |
| Counter | 68393 |
| Secretariat | 80337 |
| Shift Manager | 27000 |
| Sales | 63353 |
| Counter | 36012 |
| Shift Manager | 33360 |
| Sales | 27650 |
| Sales | 26125 |
| Sales | 69641 |
| Secretariat | 52493 |
| Customer Service | 10709 |
| Shift Manager | 54625 |
| Shift Manager | 10234 |
| Customer Service | 53998 |
| Customer Service | 39663 |
| Customer Service | 26526 |
| Shift Manager | 48255 |
| Shift Manager | 52359 |

הכנסה לטבלה omake:

| OMAKEA | |
|---------------|-------|
| APPOINTMENTID | SID |
| 18422 | 10013 |
| 34262 | 12979 |
| 43913 | 98375 |
| 83776 | 16712 |
| 62227 | 69582 |
| 71361 | 86483 |
| 98548 | 41224 |
| 34362 | 16712 |
| 49699 | 68429 |
| 63768 | 26921 |
| 59549 | 32397 |
| 83194 | 26921 |
| 63768 | 10020 |
| 30006 | 10013 |
| 32826 | 29872 |
| 27341 | 45839 |
| 83194 | 51383 |
| 37638 | 10020 |
| 37869 | 78572 |
| 25798 | 10013 |
| 66549 | 41470 |
| 38729 | 29127 |
| 72766 | 10019 |
| 96463 | 81894 |
| 73721 | 59041 |
| 19974 | 29127 |
| 44623 | 50598 |
| 33315 | 41224 |
| 31554 | 41470 |
| 76832 | 85762 |
| 58994 | 10017 |
| 54755 | 33360 |
| 14235 | 68062 |
| 97927 | 10018 |
| 43913 | 26921 |
| 39953 | 45839 |
| 69538 | 53385 |
| 79837 | 36074 |
| 37916 | 47970 |

Definition Options Result

SYSTEM@XE Generated in 0.016 seconds: 1 table(s) with 400 rows.

OMAKEA

<

Owner

>

SYSTEM

Table

OMAKEA

Number of records

400

| Name | Type | Size | Data | Master |
|---------------|--------|------|---|--------|
| APPOINTMENTID | NUMBER | 5 | List(select APPOINTMENTID from APPOINTMENT) | YES |
| SID | NUMBER | 5 | List(select SID from office) | YES |

Definition

Options

Result

SYSTEM@XE

400 records generated in 4.719 seconds

Definition Options Result

SYSTEM@XE 400 records generated in 4.719 seconds

SQL Output Statistics

```
select * from omakea
```

| | APPOINTMENTID | SID |
|----|---------------|-------|
| 1 | 11395 | 41224 |
| 2 | 11416 | 83782 |
| 3 | 11912 | 55269 |
| 4 | 12777 | 12979 |
| 5 | 13121 | 10018 |
| 6 | 13121 | 65913 |
| 7 | 13184 | 32397 |
| 8 | 13713 | 98375 |
| 9 | 13831 | 10018 |
| 10 | 13927 | 47970 |
| 11 | 13944 | 36074 |
| 12 | 14115 | 10018 |
| 13 | 14235 | 10334 |
| 14 | 14235 | 50598 |
| 15 | 14235 | 74972 |
| 16 | 14235 | 87171 |
| 17 | 14715 | 69582 |
| 18 | 15747 | 87171 |
| 19 | 16195 | 10015 |
| 20 | 16437 | 10011 |
| 21 | 16511 | 10020 |
| 22 | 17642 | 83782 |
| 23 | 18374 | 10334 |
| 24 | 18374 | 57569 |
| 25 | 18422 | 10012 |
| 26 | 18422 | 33360 |
| 27 | 18621 | 29127 |
| 28 | 18621 | 64636 |
| 29 | 19338 | 78572 |
| 30 | 19338 | 98375 |
| 31 | 19487 | 16712 |
| 32 | 19540 | 50598 |
| 33 | 21632 | 34002 |
| 34 | 21759 | 83782 |
| 35 | 22473 | 10017 |
| 36 | 22473 | 29561 |
| 37 | 22473 | 47970 |
| 38 | 22834 | 16712 |
| 39 | 22834 | 87171 |

SYSTEM@XE 409 rows selected in 0.266 seconds

הכנסה לטבלה TPREFORMEDINA:

TPREFORMEDINA

| Owner | Table | Number of records |
|--------|---------------|-------------------|
| SYSTEM | TPREFORMEDINA | 400 |

| Name | Type | Size | Data | Master |
|---------------|--------|------|---|--------|
| TID | NUMBER | 5 | List(Select TID from treatment) | |
| APPOINTMENTID | NUMBER | 5 | List(Select APPOINTMENTID from APPOINTMENT) | |

PL/SQL Developer - SYSTEM@XE - (Data Generator - New)

File VCS Project Edit Session Debug Tools Deployment Reports Window Help

Connections

Objects

SQL Window - select * from TREATMENT

SQL Output Statistics

select * from TREATMENT

| TID | APPOINTMENTID |
|-----|---------------|
| 1 | 11153 |
| 2 | 11355 |
| 3 | 11336 |
| 4 | 12285 |
| 5 | 12285 |
| 6 | 13622 |
| 7 | 13622 |
| 8 | 13622 |
| 9 | 14355 |
| 10 | 14355 |
| 11 | 14543 |
| 12 | 14543 |
| 13 | 14552 |
| 14 | 14552 |
| 15 | 14675 |
| 16 | 14675 |
| 17 | 14839 |
| 18 | 15886 |
| 19 | 15973 |
| 20 | 15973 |
| 21 | 16211 |
| 22 | 16211 |
| 23 | 16365 |
| 24 | 16754 |
| 25 | 16866 |
| 26 | 17119 |
| 27 | 17441 |
| 28 | 18323 |
| 29 | 18675 |
| 30 | 18841 |
| 31 | 19389 |
| 32 | 19434 |
| 33 | 21241 |
| 34 | 21241 |
| 35 | 21241 |
| 36 | 21534 |
| 37 | 21534 |
| 38 | 21534 |
| 39 | 22218 |

SYSTEM@XE 398 rows selected in 0.219 seconds

הכנסה לטבלה: Treatment

SQL Output Statistics

select * from treatment

| TTYPE | DESCRIPTION | PRICE | TID | TIME |
|-------|------------------------------|-------|-------|------|
| 1 | Orthodontics Extraction | 12080 | 61916 | 3 |
| 2 | Orthodontics Teeth filling | 14252 | 62262 | 1 |
| 3 | Rehabilitation Gum | 9141 | 59883 | 5 |
| 4 | Rehabilitation Braces | 2181 | 55534 | 3 |
| 5 | Rehabilitation Gum | 6397 | 82913 | 4 |
| 6 | Aesthetic Extraction | 4312 | 71983 | 2 |
| 7 | Aesthetic Gum | 3889 | 62726 | 3 |
| 8 | Aesthetic Gum | 14364 | 28947 | 3 |
| 9 | Aesthetic Teeth filling | 2900 | 51324 | 4 |
| 10 | Rehabilitation Teeth filling | 8248 | 42349 | 3 |
| 11 | Orthodontics Braces | 1821 | 91954 | 5 |
| 12 | Aesthetic Teeth filling | 3621 | 14839 | 3 |
| 13 | Rehabilitation Gum | 4366 | 85577 | 4 |
| 14 | Aesthetic Extraction | 4633 | 43825 | 6 |
| 15 | Orthodontics Extraction | 6154 | 83652 | 1 |
| 16 | Orthodontics Teeth filling | 2637 | 73179 | 2 |
| 17 | Orthodontics Extraction | 6101 | 93262 | 3 |
| 18 | Rehabilitation Gum | 9004 | 58264 | 5 |
| 19 | Aesthetic Gum | 1179 | 46956 | 2 |
| 20 | Rehabilitation Teeth filling | 9718 | 46212 | 7 |
| 21 | Orthodontics Gum | 5043 | 36836 | 4 |
| 22 | Rehabilitation Teeth filling | 9393 | 89741 | 8 |
| 23 | Aesthetic Extraction | 9172 | 31183 | 4 |
| 24 | Orthodontics Teeth filling | 12887 | 55837 | 4 |
| 25 | Rehabilitation Extraction | 998 | 31771 | 7 |
| 26 | Aesthetic Teeth filling | 7807 | 27147 | 9 |
| 27 | Aesthetic Braces | 13773 | 87322 | 6 |
| 28 | Rehabilitation Braces | 12511 | 21241 | 9 |
| 29 | Rehabilitation Braces | 3793 | 51340 | 7 |
| 30 | Rehabilitation Extraction | 4656 | 54551 | 7 |
| 31 | Orthodontics Teeth filling | 3994 | 83824 | 4 |
| 32 | Rehabilitation Teeth filling | 9978 | 55941 | 7 |
| 33 | Orthodontics Braces | 4053 | 83715 | 9 |
| 34 | Rehabilitation Gum | 7617 | 17141 | 5 |
| 35 | Aesthetic Braces | 8840 | 95253 | 5 |
| 36 | Orthodontics Teeth filling | 6547 | 25522 | 5 |
| 37 | Aesthetic Teeth filling | 3624 | 72198 | 6 |
| 38 | Rehabilitation Braces | 10087 | 72385 | 8 |
| 39 | Aesthetic Gum | 11109 | 43414 | 6 |

TREATMENT

| ITYPE | DESCRIPTION | PRICE | TID | TIME |
|----------------|---------------|-------|-------|------|
| Orthodontics | Extraction | 8056 | 56699 | 6 |
| Orthodontics | Gum | 6806 | 42853 | 6 |
| Rehabilitation | Braces | 12208 | 46612 | 2 |
| Rehabilitation | Extraction | 897 | 55477 | 3 |
| Orthodontics | Teeth filling | 2316 | 37179 | 1 |
| Rehabilitation | Gum | 12515 | 31433 | 3 |
| Rehabilitation | Gum | 9905 | 18125 | 9 |
| Orthodontics | Gum | 6179 | 95651 | 1 |
| Rehabilitation | Gum | 1940 | 42417 | 4 |
| Rehabilitation | Braces | 12104 | 95488 | 7 |
| Aesthetic | Gum | 3361 | 64193 | 4 |
| Rehabilitation | Teeth filling | 12368 | 28443 | 8 |
| Aesthetic | Teeth filling | 9920 | 92689 | 7 |
| Orthodontics | Gum | 13610 | 98131 | 1 |
| Orthodontics | Gum | 11022 | 64081 | 4 |
| Rehabilitation | Teeth filling | 14243 | 91948 | 7 |
| Rehabilitation | Gum | 2583 | 39691 | 7 |
| Orthodontics | Extraction | 6610 | 73847 | 2 |
| Orthodontics | Extraction | 11328 | 38691 | 1 |
| Aesthetic | Teeth filling | 12605 | 29731 | 2 |
| Orthodontics | Braces | 11964 | 96641 | 4 |
| Orthodontics | Teeth filling | 11575 | 59523 | 1 |
| Aesthetic | Teeth filling | 1837 | 23271 | 1 |
| Orthodontics | Gum | 6100 | 95957 | 4 |
| Aesthetic | Extraction | 3505 | 29343 | 6 |
| Orthodontics | Braces | 2405 | 46771 | 4 |
| Rehabilitation | Extraction | 5041 | 36612 | 9 |
| Orthodontics | Gum | 3248 | 41881 | 9 |
| Orthodontics | Teeth filling | 5765 | 48288 | 6 |
| Aesthetic | Extraction | 4644 | 18318 | 4 |
| Rehabilitation | Extraction | 604 | 95127 | 5 |
| Orthodontics | Gum | 7753 | 38637 | 5 |
| Aesthetic | Braces | 10692 | 68245 | 6 |
| Rehabilitation | Extraction | 2855 | 47588 | 3 |
| Aesthetic | Teeth filling | 7821 | 93855 | 8 |
| Aesthetic | Braces | 8607 | 98754 | 3 |
| Orthodontics | Braces | 3957 | 53538 | 5 |
| Rehabilitation | Braces | 11995 | 72784 | 3 |
| Rehabilitation | Braces | 6185 | 19541 | 9 |

DefinitionOptionsResult

TREATMENT

OwnerTableNumber of records

SYSTEMTREATMENT400

| Name | Type | Size | Data | Master |
|-------------|----------|------|--|--------|
| ITYPE | VARCHAR2 | 15 | List(Orthodontics',Rehabilitation',Aesthetic') | |
| DESCRIPTION | VARCHAR2 | 200 | List('Teeth filling',Extraction',Braces',Gum') | |
| PRICE | NUMBER | 5 | Random(50,15000) | |
| TID | NUMBER | 5 | {111111} | |
| TIME | NUMBER | | {1} | |

DefinitionOptionsResult

SYSTEM@XE400 records generated in 3.312 seconds

שיטה 2:

Generatedata- Website

הכנסה לטבלה :material

SQL Output Statistics

```
select * from material
```

| | MID | MNAME | AMOUNT |
|-----|-------|-----------------|--------|
| 429 | 26927 | Septanest Dkthy | 163 |
| 430 | 36778 | Ointment Yttrch | 46 |
| 431 | 86938 | Pills Ugdnqz | 243 |
| 432 | 46122 | Septanest Ybrhx | 238 |
| 433 | 97441 | Septanest Owlmu | 211 |
| 434 | 68248 | Septanest Eavhj | 212 |
| 435 | 34377 | Septanest Ngdzh | 60 |
| 436 | 16475 | Pills Onglod | 61 |
| 437 | 26499 | Anesthetic Hcdn | 116 |
| 438 | 48388 | Ointment Wcvqrw | 224 |
| 439 | 93786 | Anesthetic Eapy | 178 |
| 440 | 86698 | Antibiotic | 226 |
| 441 | 14726 | Thermometers | 37 |
| 442 | 72115 | Disinfectant | 59 |
| 443 | 12570 | Septanest | 83 |
| 444 | 11654 | Cotton Swabs | 120 |
| 445 | 24208 | Bandages | 136 |
| 446 | 61185 | Gauze | 167 |
| 447 | 14470 | Pills | 168 |
| 448 | 70154 | Gloves | 54 |
| 449 | 99078 | Anesthetic | 190 |
| 450 | 73385 | Syringes | 136 |
| 451 | 16596 | Pills | 69 |

SYSTEM@XE mid, number(5), mandatory

הכנסה לטבלה :patient

| SQL | | Output | Statistics |
|-----------------------|--------------------------------|------------------------------------|------------------|
| select * from patient | | | |
| | | | |
| | CBIRTHYEAR | CADDRESS | CNAME |
| 290 | 1959 | Ap #905-980 Est Ave | Herrod Ingram |
| 291 | 1996 | Ap #220-2101 Egestas Av. | Whitney Holt |
| 292 | 1945 | 434-1217 Non Street | Hyatt Gay |
| 293 | 2005 | Ap #508-4203 Amet, Rd. | Mollie Nguyen |
| 294 | 1916 | Ap #204-7890 Neque. Road | Hop Wright |
| 295 | 1952 | P.O. Box 394, 9604 Quis Rd. | David Sexton |
| 296 | 1939 | 401-1982 Erat. Street | Harrison Estrada |
| 297 | 2021 | 875-4218 Aliquam St. | Martin Pacheco |
| 298 | 1951 | P.O. Box 288, 6324 Primis Rd. | Jordan Mathis |
| 299 | 1941 | Ap #346-6650 Faucibus Road | Dahlia Reilly |
| 300 | 1954 | P.O. Box 321, 9761 Arcu. Rd. | Thomas Mendez |
| 301 | 1925 | Ap #405-7497 Enim. Road | Isadora Monroe |
| 302 | 1943 | 893-9162 Egestas. Av. | Marcia Arnold |
| 303 | 2000 | Ap #671-8494 Eu, Ave | Simone Suarez |
| 304 | 2005 | 4712 Nec Rd. | Galvin Reeves |
| 305 | 1983 | 392-9303 Dui Road | Kenyon Hall |
| 306 | 1959 | 205-4410 Fringilla Rd. | Charlotte Duffy |
| 307 | 2018 | P.O. Box 435, 2678 Sed Rd. | Brock Valenzuela |
| 308 | 1939 | P.O. Box 124, 5624 Eget St. | Gannon Garza |
| 309 | 1942 | Ap #110-4949 Nulla. St. | Cullen Greene |
| 310 | 2012 | P.O. Box 145, 8216 Nascetur St. | Unity Ayala |
| 311 | 1947 | Ap #339-3186 Velit. Av. | Xander Richards |
| 312 | 1997 | P.O. Box 243, 784 Facilisis Street | Shea Shepherd |
| 313 | 1973 | 1003-6551 Quis Rd. | Diana D. |
| | CGENDER | CID | CMOBILE |
| | F | 322 | 0575339523 |
| | F | 249 | 0580933718 |
| | F | 495 | 0528533319 |
| | F | 221 | 0590449083 |
| | M | 919 | 0556847954 |
| | F | 241 | 0531781517 |
| | F | 524 | 0581638292 |
| | M | 864 | 0586515972 |
| | M | 833 | 0583375862 |
| | F | 812 | 0508338631 |
| | M | 725 | 0527817282 |
| | M | 169 | 0521215647 |
| | F | 874 | 0566075237 |
| | F | 713 | 0571085153 |
| | M | 448 | 0576128443 |
| | F | 841 | 0566685505 |
| | M | 690 | 0582366338 |
| | F | 281 | 0500338368 |
| | M | 696 | 0533315498 |
| | M | 952 | 0586368553 |
| | M | 798 | 0559037161 |
| | M | 616 | 0511854727 |
| | M | 707 | 0588528867 |
| | F | 473 | 0555003373 |
| | CMAIL | | |
| | auctor.mauris@google.org | | |
| | eget@hotmail.com | | |
| | lacus.vestibulum@yahoo.org | | |
| | sodales.nisi@icloud.org | | |
| | eu.lacus@icloud.net | | |
| | mattis.cras@protonmail.com | | |
| | vivamus.sit.amet@google.ca | | |
| | pede.cum@protonmail.org | | |
| | arcu.iaculis@protonmail.couk | | |
| | diam.pellentesque@hotmail.couk | | |
| | tristique.senectus@hotmail.ca | | |
| | odio.etiam@protonmail.net | | |
| | rutrum.eu@aol.com | | |
| | posuere.at@aol.org | | |
| | vehicula.risus.nulla@aol.edu | | |
| | elementum.dui@protonmail.ca | | |
| | nunc@aol.ca | | |
| | et.ultrices.posuere@google.edu | | |
| | volutpat.nulla@hotmail.org | | |
| | tincidunt.donec@yahoo.net | | |
| | placerat@icloud.net | | |
| | ut.odio@google.ca | | |
| | pellentesque@icloud.edu | | |

הכנסה לטבלה staff:

```
select * from staff
```

| | SADDRESS | SMOBILE | SNAME | SMAIL | SID |
|-----|-------------------------------------|-----------|-------------------|--------------------------------|-------|
| 397 | Ap #719-4855 Ante St. | 535721837 | Abra Clemons | abraclemons2857@aol.org | 84940 |
| 398 | 809 Urna Street | 575013566 | Harrison Stewart | harrisonstewart@gmail.net | 19098 |
| 399 | Ap #901-2030 Vel Street | 542991526 | Jeremy Santana | jeremysantana@gmail.couk | 69373 |
| 400 | 827-8375 Aliquam Rd. | 527581368 | Constance Navarro | constancenavarro@icloud.edu | 31845 |
| 401 | 383-3411 Nam Rd. | 566718812 | Colby Shaffer | colbyshaffer7949@icloud.couk | 25922 |
| 402 | 279-4046 A, St. | 594524576 | Stacey Mcleod | staceymcleod@aol.com | 26135 |
| 403 | 4212 Odio Av. | 521145828 | Gannon Vance | gannonvance@google.org | 77934 |
| 404 | P.O. Box 408, 8813 Volutpat. Avenue | 517871957 | Alan Sullivan | alansullivan@aol.com | 83782 |
| 405 | 8129 Facilisis Av. | 598355463 | Joelle Hoover | joellehoover4378@yahoo.couk | 90376 |
| 406 | Ap #331-8940 Ut Road | 521151267 | Kane Velazquez | kanevelazquez5579@icloud.com | 90152 |
| 407 | 7215 Vestibulum Road | 556769693 | Halee Boyer | haleeboyer8640@yahoo.couk | 61039 |
| 408 | P.O. Box 933, 8375 Enim Rd. | 582388653 | Jordan Stanton | jordanstanton@gmail.net | 72497 |
| 409 | 112-260 Varius Av. | 576107777 | Jesie Reynolds | jesciereynolds4525@icloud.couk | 44135 |
| 410 | Ap #299-1591 Dictum Street | 505456764 | Harding Ballard | hardingballard7768@icloud.ca | 41470 |
| 411 | 442-2426 Ut Street | 526678882 | Gavin Foley | gavinfoley@yahoo.ca | 16017 |
| 412 | Ap #878-4716 Magna Rd. | 554512612 | Kennedy Atkins | kennedyatkins5511@yahoo.net | 68062 |
| 413 | 369-2220 Proin Av. | 556043206 | Keely Lambert | keelylambert@aol.couk | 87909 |
| 414 | Ap #778-3523 Nunc Street | 521473627 | Kerry Cantrell | kerrycantrell3347@google.couk | 37037 |
| 415 | 214-5228 Turpis St. | 540508616 | Nehru Kane | nehrukane@gmail.edu | 13854 |
| 416 | 861-3422 Et, Rd. | 548580479 | Evan Norman | evannorman3424@yahoo.net | 20080 |
| 417 | P.O. Box 302, 6246 Risus. St. | 538180461 | Flynn Fulton | flynnfulton@google.edu | 48224 |
| 418 | Ap #727-177 Pede Rd. | 545651455 | Indigo Rios | indigorios2663@aol.net | 74972 |
| 419 | 242-6132 Laoreet Ave | 535495636 | Dexter Brock | dexterbrock@google.edu | 90220 |

שיטה 3:

Tex importer:

הכנסה של staff וגם של patient:

The screenshot displays the 'New Data Set' interface on the website <https://generatedata.com/generator>. The interface is divided into two main sections: a configuration table and a code/output preview area.

Configuration Table:

| # | Data Type | Column Name | Examples | Options |
|---|----------------|-------------|------------------------|-----------------------|
| 1 | Names | SNAME | Alex Smith | Name Surname |
| 2 | Phone / Fax | SMOBILE | North America | 0500000000 |
| 3 | Email | SEMAIL | No examples available. | SOURCE: NAME FIELDS |
| 4 | Street Address | SADDRESS | No examples available. | No options available. |
| 5 | Number Range | SID | No examples available. | Between 100 and 999 |

MySQL Preview:

```
1 DROP TABLE IF EXISTS `myTable`;
2
3 CREATE TABLE `myTable` (
4   `id` mediumint(8) unsigned NOT NULL auto_increment,
5   `SNAME` varchar(255) default NULL,
6   `SMOBILE` varchar(100) default NULL,
7   `SEMAIL` varchar(255) default NULL,
8   `SADDRESS` varchar(255) default NULL,
9   `SID` mediumint default NULL,
10  PRIMARY KEY (`id`)
11 ) AUTO_INCREMENT=1;
12
13 INSERT INTO `myTable` (`SNAME`,`SMOBILE`,`SEMAIL`,`SADDRESS`,`SID`)
```

CSV Preview:

```
1 CNAME,CMOBILE,CMAIL,CBIRTHYEAR,CSEXSEX,CID,CADDRESS
2 Raymond Potter,0544414405,mauric.e@bci.com,1992,F,722,265-3441 Uma, Street
3 Alyssa Beards,0529704435,rec.urna.sociipil@hotmail.ca,2017,F,733,4p,8195-2539 Rutrum Rd.
4 Raven Melendez,0511879752,ipsum.donem.sollicitudin@google.com,1979,M,305,"P.O. Box 347, 4713 Phanetru, Avenue"
5 Cain Mercado,0535481844,velit.justobutlook.co.uk,2009,M,433,"4448 Nim, Ave"
```

קובץ גיבוי :Backup.sql

הדגמת גיבוי:

| Name | Type | Created |
|-------------------------------|-------|---------------------|
| REPCATS_INSTANTIATION_DDL | TABLE | 27/08/2011 08:23:16 |
| REPCATS_KEY_COLUMNS | TABLE | 27/08/2011 08:23:05 |
| REPCATS_OBJECT_PARAMS | TABLE | 27/08/2011 08:23:15 |
| REPCATS_OBJECT_TYPES | TABLE | 27/08/2011 08:23:14 |
| REPCATS_PARAMETER_COLUMN | TABLE | 27/08/2011 08:23:11 |
| REPCATS_PRIORITY | TABLE | 27/08/2011 08:23:09 |
| REPCATS_PRIORITY_GROUP | TABLE | 27/08/2011 08:23:09 |
| REPCATS_REFRESH_TEMPLATES | TABLE | 27/08/2011 08:23:14 |
| REPCATS_REPCAT | TABLE | 27/08/2011 08:23:04 |
| REPCATS_REPCATLOG | TABLE | 27/08/2011 08:33:09 |
| REPCATS_REPCOLUMN | TABLE | 27/08/2011 08:23:05 |
| REPCATS_REPCOLUP_PARAMS | TABLE | 27/08/2011 08:23:06 |
| REPCATS_REPOBJECT | TABLE | 27/08/2011 08:23:05 |
| REPCATS_REPPROP | TABLE | 27/08/2011 08:33:09 |
| REPCATS_REPSCHHEMA | TABLE | 27/08/2011 08:33:09 |
| REPCATS_RESOL_STATS_CONTROL | TABLE | 27/08/2011 08:23:11 |
| REPCATS_RESOLUTION | TABLE | 27/08/2011 08:23:11 |
| REPCATS_RESOLUTION_METHOD | TABLE | 27/08/2011 08:23:10 |
| REPCATS_RESOLUTION_STATISTICS | TABLE | 27/08/2011 08:23:11 |
| REPCATS_RUNTIME_PARAMS | TABLE | 27/08/2011 08:23:15 |
| REPCATS_SITE_OBJECTS | TABLE | 27/08/2011 08:23:15 |
| REPCATS_SITES_NEW | TABLE | 27/08/2011 08:23:16 |
| REPCATS_SNAPGROUP | TABLE | 27/08/2011 08:23:04 |
| REPCATS_TEMPLATE_OBJECTS | TABLE | 27/08/2011 08:23:16 |
| REPCATS_TEMPLATE_PARAMS | TABLE | 27/08/2011 08:23:15 |
| REPCATS_TEMPLATE_REFGROUPS | TABLE | 27/08/2011 08:23:14 |
| REPCATS_TEMPLATE_SITES | TABLE | 27/08/2011 08:23:15 |
| REPCATS_TEMPLATE_STATUS | TABLE | 27/08/2011 08:23:14 |
| REPCATS_TEMPLATE_TARGETS | TABLE | 27/08/2011 08:23:15 |
| REPCATS_TEMPLATE_TYPES | TABLE | 27/08/2011 08:23:14 |
| REPCATS_USER_AUTHORIZATIONS | TABLE | 27/08/2011 08:23:14 |
| REPCATS_USER_PARAM_VALUES | TABLE | 27/08/2011 08:23:15 |
| SQLPLUS_PRODUCT_PROFILE | TABLE | 27/08/2011 08:36:13 |
| USER | TABLE | 27/05/2014 14:07:11 |
| TPREFORMEDINA | TABLE | 22/05/2014 21:57:29 |
| TREATMENT | TABLE | 26/05/2014 10:47:23 |

Oracle Export: SQL Inserts PL/SQL Developer Log

☐ Drop tables

☒ Create tables

☐ Truncate tables

☒ Delete records

☒ Disable triggers

☐ Zip

☒ Disable foreign key constraints

☒ Include storage

☒ Include privileges

Commit every 100 records (0 = never)

Where clause

Output file: C:\Users\maria\Desktop\backup.sql

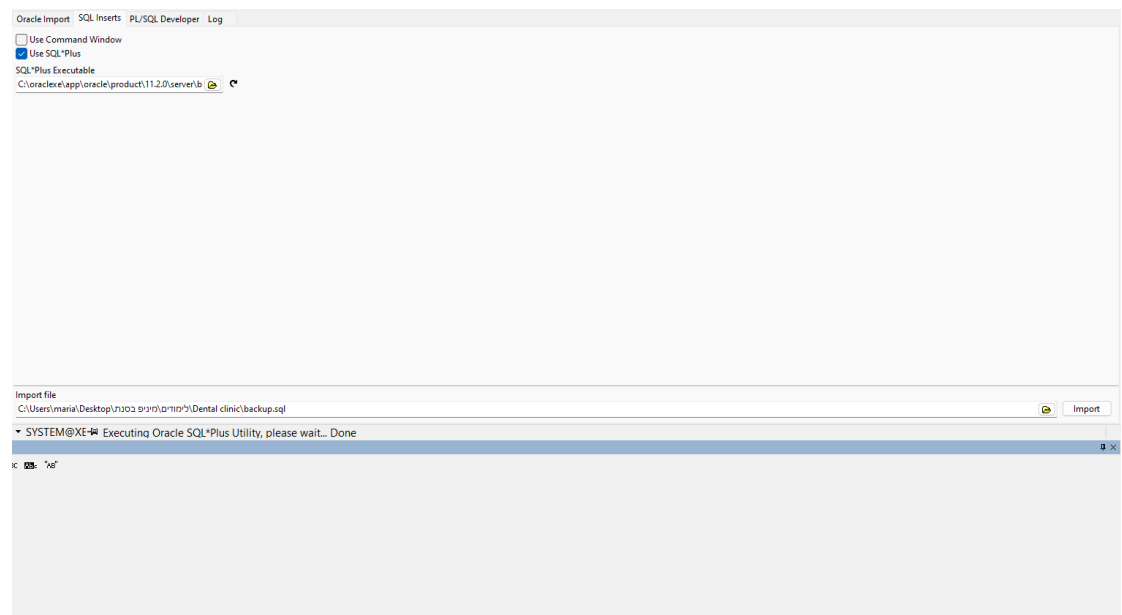
Export

SYSTEM@XE Exporting... Done

מחיקה:

| SQL | Output | Statistics |
|---|--------|------------|
| <pre>DROP TABLE Patient; -- Documentation: The Patient table is dropped as per the specified order. -- Drop the Office table DROP TABLE Office; -- Documentation: The Office table is dropped as per the specified order. -- Drop the Doctor table DROP TABLE Doctor; -- Documentation: The Doctor table is dropped as per the specified order. -- Drop the Staff table last DROP TABLE Staff; -- Documentation: The Staff table is dropped last as per the specified order.</pre> | | |
| <div>Drop payment Drop musedint Drop tpreformedina Drop omakea Drop treatment Drop material Drop appointment Drop patient Drop office Drop doctor Drop staff</div> <div>(no result set)</div> | | |
| Done in 0.031 seconds | | |

שחזור:



שאלות:

שאלת select

Select 1:

הסבר: עקב ניסיון ייעול משאבי המרפאה נרצה לראות לכל פגישה של לקוח מידע עליו וכמה עלתה כל הפגישה על כל הטיפולים השונים שבה ללקוח לעומת למרפאה עבור לקוחות שלא ביצעו פגישה וטיפולים לא נראה מידע כמובן

הקוד:

SELECT DISTINCT

,a.appointmentId

,p.cName

,p.cGender

,a.aDate

SUM(pa.TotalPrice) OVER (PARTITION BY a.AppointmentID) AS

,Cost_To_Patient

SUM(t.Price) OVER (PARTITION BY a.AppointmentID) AS Cost_To_Clinic

FROM system.patient p

LEFT JOIN system.appointment a ON p.cId = a.cId

LEFT JOIN system.tPreformedInA tpia ON a.AppointmentID =
tpia.AppointmentID

LEFT JOIN system.treatment t ON tpia.tId = t.tId

LEFT JOIN system.payment pa ON a.AppointmentID = pa.AppointmentID

WHERE p.cName IS NOT NULL

AND p.cGender IS NOT NULL

AND a.aDate IS NOT NULL

AND pa.TotalPrice IS NOT NULL

AND t.Price IS NOT NULL

;ORDER BY p.cName, a.aDate














תוצאות :

SQL

Output

Statistics

```
SELECT DISTINCT
  a.appointmentId,
  p.cName,
  p.cGender,
  a.aDate,
  SUM(pa.TotalPrice) OVER (PARTITION BY a.AppointmentID) AS Cost_To_Patient,
  SUM(t.Price) OVER (PARTITION BY a.AppointmentID) AS Cost_To_Clinic
FROM system.patient p
LEFT JOIN system.appointment a ON p.cId = a.cId
LEFT JOIN system.tPreformedInA tpia ON a.AppointmentID = tpia.AppointmentID
LEFT JOIN system.treatment t ON tpia.tId = t.tId
LEFT JOIN system.payment pa ON a.AppointmentID = pa.AppointmentID
WHERE p.cName IS NOT NULL
  AND p.cGender IS NOT NULL
  AND a.aDate IS NOT NULL
  AND pa.TotalPrice IS NOT NULL
  AND t.Price IS NOT NULL
ORDER BY p.cName, a.aDate;
```

| | APPOINTMENTID | CNAME | CGENDER | ADATE | COST_TO_PATIENT | COST_TO_CLINIC | |
|----|---------------|-----------------|---------|-------|-----------------|----------------|-------|
| 1 | 42733 | Abraham Barlow | ... | F | 30/07/2029 | 3484 | 11175 |
| 2 | 78169 | Acton Santana | ... | M | 21/05/2025 | 2506 | 42198 |
| 3 | 19548 | Acton Santana | ... | M | 02/01/2027 | 1551 | 4856 |
| 4 | 59588 | Addison Tran | ... | M | 19/10/2024 | 3972 | 26724 |
| 5 | 82439 | Addison Tran | ... | M | 27/11/2025 | 984 | 19236 |
| 6 | 26926 | Alan Head | ... | F | 28/07/2027 | 2470 | 6273 |
| 7 | 37647 | Alexa Nielsen | ... | F | 15/07/2028 | 2960 | 43611 |
| 8 | 41673 | Alexa Nielsen | ... | F | 10/11/2028 | 1390 | 42618 |
| 9 | 14715 | Aline Ramos | ... | M | 16/07/2028 | 2462 | 33372 |
| 10 | 96463 | Aline Ramos | ... | M | 11/11/2028 | 2281 | 658 |
| 11 | 43637 | Alma Herrera | ... | M | 07/03/2027 | 3988 | 19561 |
| 12 | 24984 | Alma Welch | ... | M | 13/01/2028 | 7112 | 17336 |
| 13 | 51446 | Alma Welch | ... | M | 25/04/2028 | 1649 | 1145 |
| 14 | 84414 | Althea Randolph | ... | M | 16/03/2025 | 4654 | 2169 |
| 15 | 89616 | Althea Randolph | ... | M | 29/09/2027 | 4478 | 28901 |
| 16 | 33732 | Anika Hopper | ... | F | 02/07/2027 | 2054 | 12119 |
| 17 | 89358 | Anika Hopper | ... | F | 11/07/2028 | 736 | 876 |
| 18 | 92587 | Arden Riley | ... | M | 02/04/2024 | 4476 | 33796 |
| 19 | 57934 | Arden Riley | ... | M | 08/04/2025 | 795 | 7314 |
| 20 | 44623 | Aniana Macias | ... | F | 20/09/2027 | 3027 | 26509 |
| 21 | 23487 | Ashely Wilcox | ... | F | 24/09/2024 | 2628 | 17157 |

Select 2:

הסבר: כחלק מניהול המלאי נרצה לבדוק מאילו חומרים יש מעט מדי ובנוסף הם שימושיים.

נציג כל מוצר שיש ממנו פחות מ200 וגם הוא משוייך ללפחות 5 תורים

הקוד:

```

SELECT m.mId, m.mName, m.Amount, COUNT(DISTINCT tpia.AppointmentID)
      AS appointment_count
FROM system.material m
      JOIN system.musedint mui ON m.mId = mui.mId
      JOIN system.treatment t ON mui.tId = t.tId
      JOIN system.tpreformedina tpia ON t.tId = tpia.tId
WHERE m.Amount < 200
GROUP BY m.mId, m.mName, m.Amount
HAVING COUNT(DISTINCT tpia.AppointmentID) >= 5
;ORDER BY m.mId

```

תוצאות:

| SQL Output Statistics | | | | |
|---|------------------------|--------|-------------------|--|
| <pre> SELECT m.mId, m.mName, m.Amount, COUNT(DISTINCT tpia.AppointmentID) AS appointment_count FROM system.material m JOIN system.musedint mui ON m.mId = mui.mId JOIN system.treatment t ON mui.tId = t.tId JOIN system.tpreformedina tpia ON t.tId = tpia.tId WHERE m.Amount < 200 GROUP BY m.mId, m.mName, m.Amount HAVING COUNT(DISTINCT tpia.AppointmentID) >= 5 ORDER BY m.mId;</pre> | | | | |
| MID | MNAME | AMOUNT | APPOINTMENT_COUNT | |
| 1 | 11997 Ointment Klsbvd | 88 | 5 | |
| 2 | 15869 Antibiotic Nvgj | 70 | 5 | |
| 3 | 15958 Anesthetic Naha | 144 | 7 | |
| 4 | 16331 Antibiotic Qnrr | 173 | 5 | |
| 5 | 24124 Pills Zjorvz | 3 | 5 | |
| 6 | 27219 Septanest Ajcyl | 99 | 8 | |
| 7 | 29442 Septanest Kqdp | 55 | 5 | |
| 8 | 32358 Anesthetic Swft | 8 | 5 | |
| 9 | 33316 Septanest Wvly | 160 | 7 | |
| 10 | 34865 Antibiotic Tdtw | 142 | 5 | |
| 11 | 36647 Ointment Xmaudd | 196 | 6 | |
| 12 | 37596 Pills Zrmeu | 158 | 10 | |
| 13 | 42637 Ointment Pjadm | 153 | 5 | |
| 14 | 43389 Anesthetic Spum | 61 | 9 | |
| 15 | 44888 Antibiotic ltrmt | 60 | 6 | |
| 16 | 49899 Anesthetic Wwvxj | 86 | 8 | |
| 17 | 56631 Ointment Aziql | 169 | 5 | |
| 18 | 56794 Ointment Qjgry | 17 | 5 | |
| 19 | 57861 Anesthetic Atyu | 114 | 5 | |
| 20 | 61271 Ointment Udfwoh | 41 | 5 | |
| 21 | 62838 Septanest Lxau | 137 | 5 | |
| 22 | 67682 Antibiotic Vjxl | 93 | 5 | |
| 23 | 69498 Pills Fsnzbo | 114 | 6 | |
| 24 | 75629 Pills Qnfrsr | 80 | 5 | |
| 25 | 82918 Anesthetic Rpll | 173 | 5 | |
| 26 | 87251 Septanest Mktmj | 59 | 5 | |
| 27 | 93815 Anesthetic Ukof | 117 | 6 | |
| 28 | 97875 Anesthetic Khqg | 93 | 5 | |
| 29 | 98712 Anesthetic Lyeg | 7 | 5 | |
| 30 | 99117 Ointment Cfuzwa | 192 | 7 | |

Select 3:

הסבר:

נרצה להציג את עובדי המשרד היעילים ביותר,

עובד משרד יעיל הוא עובד אשר קבע לפחות 10 תורים, נציג אותם על פי מספר הפגישות שקבעו

קוד:

```

SELECT o.sId, s.sName, COUNT(DISTINCT a.AppointmentID) AS
    appointment_count
FROM system.office o
    JOIN system.staff s ON o.sId = s.sId
    JOIN system.omakea oma ON o.sId = oma.sId
    JOIN system.appointment a ON oma.AppointmentID = a.AppointmentID
GROUP BY o.sId, s.sName
HAVING COUNT(DISTINCT a.AppointmentID) >= 10
;ORDER BY appointment_count DESC
```













תוצאות:

SQL

Output

Statistics

```
SELECT o.sId, s.sName, COUNT(DISTINCT a.AppointmentID) AS appointment_count
FROM system.office o
JOIN system.staff s ON o.sId = s.sId
JOIN system.omakea oma ON o.sId = oma.sId
JOIN system.appointment a ON oma.AppointmentID = a.AppointmentID
GROUP BY o.sId, s.sName
HAVING COUNT(DISTINCT a.AppointmentID) >= 10
ORDER BY appointment_count DESC;
```

| | SID | SNAME | APPOINTMENT_COUNT |
|----|-------|--------------------|-------------------|
| 1 | 10017 | James White | 14 |
| 2 | 81894 | Todd Jimenez | 13 |
| 3 | 10018 | Charl Walker | 12 |
| 4 | 74972 | Indigo Rios | 12 |
| 5 | 10016 | Isabella Lewis | 11 |
| 6 | 41224 | Hayden Green | 11 |
| 7 | 69582 | Macey Leonard | 11 |
| 8 | 98041 | Silas Berger | 10 |
| 9 | 33360 | Josiah Pacheco | 10 |
| 10 | 29127 | Caleb Battle | 10 |
| 11 | 47970 | Jacqueline Fleming | 10 |
| 12 | 12979 | Nayda Olson | 10 |
| 13 | 29872 | Gil Morse | 10 |

Select 4:

הסבר:

בשביל לבצע סקר ולהבין יותר טוב את קהל היעד של המרפאה, המרפאה רוצה להבין את פרופיל הגילאים של המטופלים שלה באופן מדויק יותר ולתכנן את השירותים והטיפולים שלה בהתאם לצרכיהם הספציפיים- היא ממיינת את המטופלים שלה בשאלתה זו לפי גיל ממוצע

קוד:

SELECT

,p.cGender

,ROUND(AVG(EXTRACT(YEAR FROM SYSDATE) - p.cBirthYear)) AS avg_age

COUNT(DISTINCT p.cId) AS patient_count

FROM system.patient p

JOIN system.appointment a ON p.cId = a.cId

WHERE a.aDate >= ADD_MONTHS(SYSDATE, -6)

AND a.aDate <= SYSDATE
















GROUP BY p.cGender

;ORDER BY avg_age DESC

תוצאות:

SQLOutputStatistics

```
SELECT
    p.cGender,
    ROUND (AVG (EXTRACT (YEAR FROM SYSDATE) - p.cBirthYear)) AS avg_age,
    COUNT (DISTINCT p.cId) AS patient_count
FROM system.patient p
JOIN system.appointment a ON p.cId = a.cId
WHERE a.aDate >= ADD_MONTHS (SYSDATE, -6)
    AND a.aDate <= SYSDATE
GROUP BY p.cGender
ORDER BY avg_age DESC;
```

| | | CGENDER | AVG_AGE | PATIENT_COUNT |
|---|---|---------|---------|---------------|
| ▶ | 1 | M | 60 | 8 |
| | 2 | F | 44 | 15 |

שאלת מחיקה:

1

הסבר:

התגלה כי חלה טעות ברישום הטיפולים שעתידים להתקיים בתורים בחודש מרץ 2026.

המזכירות תרצה למחוק את הנתונים כדי לבצע הכנסה ידנית מחדש

קוד:

--Show the treatments that are in appointments in march 2026 (To see before and after)

```
SELECT tpia.*, a.ADATE
FROM system.tpreformedina tpia
INNER JOIN system.appointment a ON a.AppointmentID = tpia.AppointmentID
WHERE EXTRACT(MONTH FROM a.aDate) = 3
      AND EXTRACT(YEAR FROM a.aDate) = 2026;
```

--Delete them

```
DELETE FROM system.tpreformedina tpia
WHERE tpia.AppointmentID IN (
  SELECT a.AppointmentID
  FROM system.appointment a
  WHERE EXTRACT(MONTH FROM a.aDate) = 3
        AND EXTRACT(YEAR FROM a.aDate) = 2026
);
```

(בשאלת מחיקה הוספנו חוץ משאלת המחיקה עוד קוד select שיוכל להראות את הנתונים לפני ואחרי המחיקה)

צילום הנתונים לפני מחיקה:

SQLOutputStatistics

```
--Show the treatments that are in appointments in march 2026 (To see before and after)
SELECT tpia.*, a.ADATE
FROM system.tpreformedina tpia
INNER JOIN system.appointment a ON a.AppointmentID = tpia.AppointmentID
WHERE EXTRACT(MONTH FROM a.aDate) = 3
      AND EXTRACT(YEAR FROM a.aDate) = 2026;

--Delete them
DELETE FROM system.tpreformedina tpia
WHERE tpia.AppointmentID IN (
  SELECT a.AppointmentID
  FROM system.appointment a
  WHERE EXTRACT(MONTH FROM a.aDate) = 3
        AND EXTRACT(YEAR FROM a.aDate) = 2026
);
```

| | TID | APPOINTMENTID | ADATE |
|----|-------|---------------|------------|
| 1 | 16866 | 59864 | 31/03/2026 |
| 2 | 23243 | 52874 | 01/03/2026 |
| 3 | 26551 | 53336 | 28/03/2026 |
| 4 | 36999 | 57217 | 12/03/2026 |
| 5 | 55142 | 59864 | 31/03/2026 |
| 6 | 57499 | 62316 | 16/03/2026 |
| 7 | 57734 | 52254 | 08/03/2026 |
| 8 | 57734 | 53336 | 28/03/2026 |
| 9 | 59859 | 38929 | 25/03/2026 |
| 10 | 69323 | 59923 | 03/03/2026 |
| 11 | 69548 | 52874 | 01/03/2026 |
| 12 | 69989 | 35517 | 18/03/2026 |
| 13 | 73179 | 59923 | 03/03/2026 |
| 14 | 76324 | 52874 | 01/03/2026 |
| 15 | 83436 | 59923 | 03/03/2026 |
| 16 | 83715 | 31948 | 09/03/2026 |
| 17 | 86775 | 44833 | 01/03/2026 |
| 18 | 86933 | 76832 | 20/03/2026 |
| 19 | 87911 | 84117 | 07/03/2026 |
| 20 | 99588 | 47365 | 03/03/2026 |

13:27

SYSTEM@XE

20 rows selected in 0.047 seconds

צילום הנתונים אחרי המחיקה:

SQLOutputStatistics

```
--Show the treatments that are in appointments in march 2026 (To see before and after)
SELECT tpia.*, a.ADATE
FROM system.tpreformedina tpia
INNER JOIN system.appointment a ON a.AppointmentID = tpia.AppointmentID
WHERE EXTRACT(MONTH FROM a.aDate) = 3
      AND EXTRACT(YEAR FROM a.aDate) = 2026;

--Delete them
DELETE FROM system.tpreformedina tpia
WHERE tpia.AppointmentID IN (
  SELECT a.AppointmentID
  FROM system.appointment a
  WHERE EXTRACT(MONTH FROM a.aDate) = 3
        AND EXTRACT(YEAR FROM a.aDate) = 2026
);
```

| | TID | APPOINTMENTID | ADATE |
|--|-----|---------------|-------|
|--|-----|---------------|-------|

:2

הסבר:

כחלק מהמעבר למערכת החדשה, הנהלת המרפאה החליטה שכל התשלומים והחיובים שבוצעו בשנת 2023 ימחקו ממסד הנתונים הישן, כדי להתחיל את השנה החדשה עם מסד נתונים נקי ומעודכן.

קוד:

payment deateles before delete - select 2023--

```
SELECT p.Id, p.TotalPrice, p.pDate, a.aDate
```

```
FROM system.Payment p
```

```
JOIN system.Appointment a ON p.AppointmentID = a.AppointmentID
```

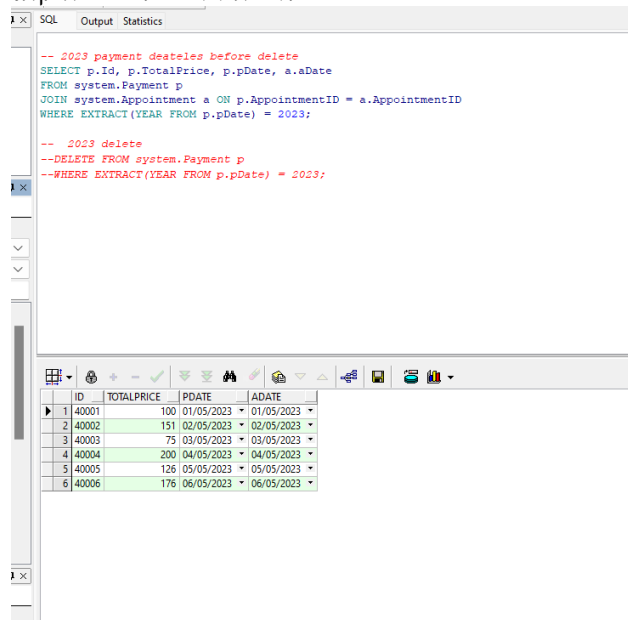
```
;WHERE EXTRACT(YEAR FROM p.pDate) = 2023
```

delete 2023--

```
DELETE FROM system.Payment p
```

```
;WHERE EXTRACT(YEAR FROM p.pDate) = 2023
```

צילום הנתונים לפני מחיקה:



The screenshot shows a SQL IDE with a query window and a results window. The query window contains the following SQL code:

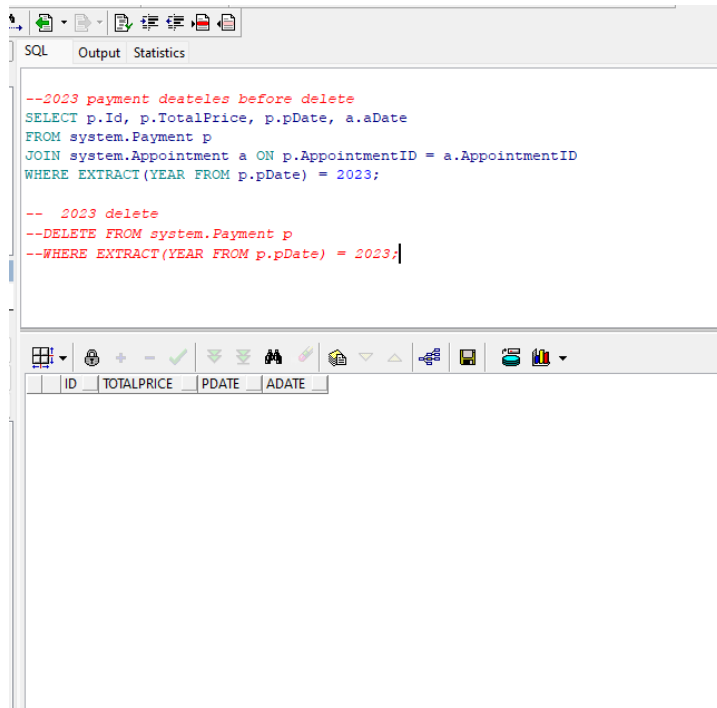
```
-- 2023 payment deateles before delete
SELECT p.Id, p.TotalPrice, p.pDate, a.aDate
FROM system.Payment p
JOIN system.Appointment a ON p.AppointmentID = a.AppointmentID
WHERE EXTRACT(YEAR FROM p.pDate) = 2023;

-- 2023 delete
--DELETE FROM system.Payment p
--WHERE EXTRACT(YEAR FROM p.pDate) = 2023;
```

The results window displays a table with 6 rows and 4 columns: ID, TOTALPRICE, PDATE, and ADATE. The data is as follows:

| ID | TOTALPRICE | PDATE | ADATE |
|---------|------------|------------|------------|
| 1 40001 | 100 | 01/05/2023 | 01/05/2023 |
| 2 40002 | 151 | 02/05/2023 | 02/05/2023 |
| 3 40003 | 75 | 03/05/2023 | 03/05/2023 |
| 4 40004 | 200 | 04/05/2023 | 04/05/2023 |
| 5 40005 | 126 | 05/05/2023 | 05/05/2023 |
| 6 40006 | 176 | 06/05/2023 | 06/05/2023 |

צילום נתונים לאחר המחיקה:



The screenshot shows a SQL IDE window with a query editor and a table view. The query editor contains the following SQL code:

```
--2023 payment deateles before delete  
SELECT p.Id, p.TotalPrice, p.pDate, a.aDate  
FROM system.Payment p  
JOIN system.Appointment a ON p.AppointmentID = a.AppointmentID  
WHERE EXTRACT(YEAR FROM p.pDate) = 2023;  
  
-- 2023 delete  
--DELETE FROM system.Payment p  
--WHERE EXTRACT(YEAR FROM p.pDate) = 2023;
```

Below the query editor, a table view is displayed with the following columns: ID, TOTALPRICE, PDATE, and ADATE. The table is currently empty.

שאלתת: update

update 1

הסבר:

בשביל ניהול תקין של מלאי החומרים נרצה למצוא מי הם 20 החומרים שמשתמשים בהם הכי הרבה ונזמין מהם עוד עשר הערה- בכל תור עושים טיפולים שונים ולכל טיפול משויכים חומרים דרושים לו.

קוד:

-- Update the amount for the top 20 most used materials

```
UPDATE system.material m
SET m.Amount = m.Amount + 10
WHERE m.mId IN (
    SELECT mId
    FROM (
        SELECT m.mId
        FROM system.material m
        JOIN system.musedint mui ON m.mId = mui.mId
        JOIN system.treatment t ON mui.tId = t.tId
        JOIN system.tpreformedina tpia ON t.tId = tpia.tId
        GROUP BY m.mId
        ORDER BY COUNT(*) DESC
    )
    WHERE ROWNUM <= 20
);
```

-- Find the top 20 most used (in appointments) materials (use to see the before and after the change)

```
SELECT *
FROM (
    SELECT m.mId, m.mName, m.amount, COUNT(*) AS usageCount
```

```

FROM system.material m

JOIN system.musedint mui ON m.mld = mui.mld

JOIN system.treatment t ON mui.tld = t.tld

JOIN system.tpreformedina tpia ON t.tld = tpia.tld

GROUP BY m.mld, m.mName, m.amount

ORDER BY COUNT(*) DESC

)

WHERE ROWNUM <= 20

```

(גם כאן נשים שאילתת select שתראה את הנתונים לפני ואחרי עדכון)

צילום לפני עדכון :

```
-- Show the materials (before and after change)
SELECT *
FROM (
  SELECT m.mld, m.mName, m.amount, COUNT(*) AS usageCount
  FROM system.material m
  JOIN system.musedint mui ON m.mld = mui.mld
  JOIN system.treatment t ON mui.tld = t.tld
  JOIN system.tpreformedina tpia ON t.tld = tpia.tld
  GROUP BY m.mld, m.mName, m.amount
  ORDER BY COUNT(*) DESC
)
WHERE ROWNUM <= 20
```

| | MID | MNAME | AMOUNT | USAGECOUNT |
|----|-------|------------------|--------|------------|
| 1 | 37596 | Pills Zameu | 148 | 10 |
| 2 | 43389 | Anesthetic Spwm | 51 | 9 |
| 3 | 48899 | Anesthetic Wwvj | 76 | 9 |
| 4 | 12353 | Anesthetic Vfrmi | 202 | 8 |
| 5 | 27219 | Septanest Ajcyl | 89 | 8 |
| 6 | 19558 | Anesthetic Neha | 134 | 7 |
| 7 | 33316 | Septanest Wlvs | 150 | 7 |
| 8 | 99117 | Ointment Cluzwa | 182 | 7 |
| 9 | 36647 | Ointment Xmaudd | 186 | 6 |
| 10 | 93815 | Anesthetic Ukof | 107 | 6 |
| 11 | 28379 | Anesthetic Mbuw | 215 | 6 |
| 12 | 17776 | Ointment Ddoald | 289 | 6 |
| 13 | 24183 | Septanest | 204 | 6 |
| 14 | 29767 | Ointment Vynolg | 239 | 6 |
| 15 | 69498 | Pills Fanzbo | 104 | 6 |
| 16 | 63597 | Pills Mlwnd | 216 | 6 |
| 17 | 44888 | Antibiotic Itmt | 50 | 6 |
| 18 | 15869 | Antibiotic Nvgj | 60 | 5 |
| 19 | 24124 | Pills Zjonz | 3 | 5 |
| 20 | 67882 | Antibiotic Ypxl | 93 | 5 |

SYSTEM@XE 20:21 20 rows selected in 0.047 seconds

צילום אחרי עדכון:

```
-- Update the amount for the top 20 most used materials
UPDATE system.material m
SET m.Amount = m.Amount + 10
WHERE m.mId IN (
  SELECT mId
  FROM (
    SELECT m.mId
    FROM system.material m
    JOIN system.musedint mui ON m.mId = mui.mId
    JOIN system.treatment t ON mui.tId = t.tId
    JOIN system.tpreformedina tpia ON t.tId = tpia.tId
    GROUP BY m.mId
    ORDER BY COUNT(*) DESC
  )
  WHERE ROWNUM <= 20
);

-- Show the materials (before and after change)
SELECT *
FROM (
  SELECT m.mId, m.mName, m.amount, COUNT(*) AS usageCount
  FROM system.material m
  JOIN system.musedint mui ON m.mId = mui.mId
  JOIN system.treatment t ON mui.tId = t.tId
  JOIN system.tpreformedina tpia ON t.tId = tpia.tId
  GROUP BY m.mId, m.mName, m.amount
  ORDER BY COUNT(*) DESC
)
WHERE ROWNUM <= 20
```

| | MID | MNAME | AMOUNT | USAGECOUNT |
|----|-------|------------------|--------|------------|
| 1 | 37596 | Pills Zizmeu | 158 | 10 |
| 2 | 43389 | Anesthetic Spxrn | 61 | 9 |
| 3 | 49899 | Anesthetic Wwxj | 86 | 9 |
| 4 | 27219 | Septanest Ajcyl | 99 | 8 |
| 5 | 12353 | Anesthetic Vfrni | 212 | 8 |
| 6 | 15958 | Anesthetic Naha | 144 | 7 |
| 7 | 99117 | Ointment Cfuzwa | 192 | 7 |
| 8 | 33316 | Septanest Wvlys | 160 | 7 |
| 9 | 24183 | Septanest | 214 | 6 |
| 10 | 63597 | Pills Mlavlz | 226 | 6 |
| 11 | 28379 | Anesthetic Mbuw | 225 | 6 |
| 12 | 69498 | Pills Fonzbo | 114 | 6 |
| 13 | 93815 | Anesthetic Ukof | 117 | 6 |
| 14 | 17776 | Ointment Ddoald | 299 | 6 |

SYSTEM@XE 20 rows selected in 0.047 seconds

2 update

הסבר:

בשל יוקר המחיה שפגע בישראל בשנת 2023 הוחלט להעלות את מחירי הטיפול במרפאת השיניים

המרפאה תעדכן את המחיר של כל הטיפולים שבוצעו מתחילת השנה, ומעלה אותו ב-5%

קוד:

-- the Select

SELECT t.tId, t.tType, t.Description, t.Price

FROM system.Treatment t

JOIN system.TPreformedInA tpia ON t.tId = tpia.tId

JOIN system.Appointment a ON tpia.AppointmentID = a.AppointmentID

WHERE a.aDate >= TO_DATE('2023-01-01', 'YYYY-MM-DD')

ORDER BY a.aDate;

-- the update query


```

UPDATE system.Treatment

SET Price = Price * 1.05

WHERE tId IN (

SELECT t.tId

FROM system.Treatment t

JOIN system.TPreformedInA tpia ON t.tId = tpia.tId

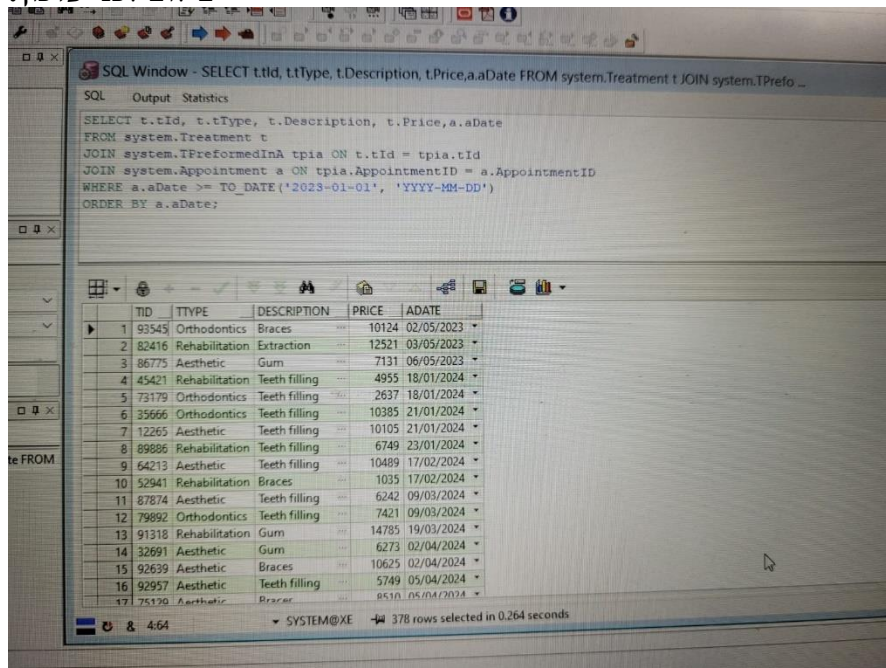
JOIN system.Appointment a ON tpia.AppointmentID = a.AppointmentID

WHERE a.aDate >= TO_DATE('2023-01-01', 'YYYY-MM-DD')

);

```

צילום לפני עדכון:



SQL Window - SELECT t.tId, t.tType, t.Description, t.Price, a.aDate FROM system.Treatment t JOIN system.TPreformedInA tpia ON t.tId = tpia.tId JOIN system.Appointment a ON tpia.AppointmentID = a.AppointmentID WHERE a.aDate >= TO_DATE('2023-01-01', 'YYYY-MM-DD') ORDER BY a.aDate;

| | TID | TTYPE | DESCRIPTION | PRICE | ADATE |
|----|-------|----------------|---------------|-------|------------|
| 1 | 93545 | Orthodontics | Braces | 10124 | 02/05/2023 |
| 2 | 82416 | Rehabilitation | Extraction | 12521 | 03/05/2023 |
| 3 | 86775 | Aesthetic | Gum | 7131 | 06/05/2023 |
| 4 | 45421 | Rehabilitation | Teeth filling | 4955 | 18/01/2024 |
| 5 | 73179 | Orthodontics | Teeth filling | 2637 | 18/01/2024 |
| 6 | 35666 | Orthodontics | Teeth filling | 10385 | 21/01/2024 |
| 7 | 12265 | Aesthetic | Teeth filling | 10105 | 21/01/2024 |
| 8 | 89886 | Rehabilitation | Teeth filling | 6749 | 23/01/2024 |
| 9 | 64213 | Aesthetic | Teeth filling | 10489 | 17/02/2024 |
| 10 | 52941 | Rehabilitation | Braces | 1035 | 17/02/2024 |
| 11 | 87874 | Aesthetic | Teeth filling | 6242 | 09/03/2024 |
| 12 | 79892 | Orthodontics | Teeth filling | 7421 | 09/03/2024 |
| 13 | 91318 | Rehabilitation | Gum | 14785 | 19/03/2024 |
| 14 | 32691 | Aesthetic | Gum | 6273 | 02/04/2024 |
| 15 | 92639 | Aesthetic | Braces | 10625 | 02/04/2024 |
| 16 | 92957 | Aesthetic | Teeth filling | 5749 | 05/04/2024 |
| 17 | 75120 | Aesthetic | Braces | 8510 | 05/04/2024 |

378 rows selected in 0.264 seconds

צילום לאחר עדכון:

SQL Output Statistics

```
-- the select
SELECT t.tId, t.tType, t.Description, t.Price, a.aDate
FROM system.Treatment t
JOIN system.TPreformedInA tpia ON t.tId = tpia.tId
JOIN system.Appointment a ON tpia.AppointmentID = a.AppointmentID
WHERE a.aDate >= TO_DATE('2023-01-01', 'YYYY-MM-DD')
ORDER BY a.aDate;

-- the update query
--UPDATE system.Treatment
--SET Price = Price * 1.05
--WHERE tId IN (
--SELECT t.tId
--FROM system.Treatment t
--JOIN system.TPreformedInA tpia ON t.tId = tpia.tId
--JOIN system.Appointment a ON tpia.AppointmentID = a.AppointmentID
--WHERE a.aDate >= TO_DATE('2023-01-01', 'YYYY-MM-DD')
--);
```

| | TID | TTYPE | DESCRIPTION | PRICE | ADATE |
|----|-------|----------------|---------------|-------|------------|
| 1 | 93545 | Orthodontics | Braces | 13567 | 02/05/2023 |
| 2 | 82416 | Rehabilitation | Extraction | 16779 | 03/05/2023 |
| 3 | 86775 | Aesthetic | Gum | 9556 | 06/05/2023 |
| 4 | 45421 | Rehabilitation | Teeth filling | 6640 | 18/01/2024 |
| 5 | 75179 | Orthodontics | Teeth filling | 3533 | 18/01/2024 |
| 6 | 35666 | Orthodontics | Teeth filling | 13916 | 21/01/2024 |
| 7 | 12265 | Aesthetic | Teeth filling | 13542 | 21/01/2024 |
| 8 | 89886 | Rehabilitation | Teeth filling | 9044 | 23/01/2024 |
| 9 | 64213 | Aesthetic | Teeth filling | 14055 | 17/02/2024 |
| 10 | 52941 | Rehabilitation | Braces | 1387 | 17/02/2024 |
| 11 | 87874 | Aesthetic | Teeth filling | 8364 | 09/03/2024 |
| 12 | 79892 | Orthodontics | Teeth filling | 9946 | 09/03/2024 |

hadassz@XE 12 rows selected in 0.032 seconds (more...)

שאלות עם פרמטרים

שאלת 1 עם פרמטר :

הסבר:

השאלת היא-

עקב ייעול תקציב הוחלט לעשות בירור עבור עובדים אשר לא תורמים למשרד, רופא X נמצא לא יעיל,

נרצה לזמן אותו לבירור, ובינתיים נשנה את כל הפגישות שלו כך שרופא אחר באותו התחום יעשה אותן במקומו.

השאלת תמצא את הפגישות של הרופא המושהה, תחפש רופא אחר באותו התחום מומחיות באופן אקראי ותשנה כך שהוא יעשה את הפגישה

קוד:

--Move the appointments that belong to the suspended doctor to a random doctor with the same Specialties

```
UPDATE system.appointment
```

```
SET sld = (
```

```
SELECT sld FROM (
```

```
SELECT d.sld
```

```
FROM system.doctor d
```

```
WHERE d.Specialties = (
```

```
SELECT Specialties
```

```
FROM system.doctor
```

```
WHERE sld = (<name=Doctor_id list="select distinct doc.sld from doctor  
doc order by doc.sld" hint="Doctor Id has 5 digits" required= true type=integer >)
```

```
)
```

```
AND d.sld <> &Doctor_id
```

```
ORDER BY dbms_random.value
```

```
)
```

```
WHERE ROWNUM = 1
```

```
)  
WHERE sId = &Doctor_id;
```

--The followings are just to check that everything worked well, No need to run

--View the doctors with the same Specialties as the suspended doctor

```
SELECT * from system.doctor d  
WHERE d.Specialties = (  
    SELECT Specialties  
    FROM system.doctor
```

```
WHERE sId = (&<name=Doctor_id list="select distinct doc.sId from doctor doc  
    order by doc.sId" hint="Doctor Id has 5 digits" required= true type=integer >)  
)  
AND d.sId <> &Doctor_id
```

--View the appointments of the suspended doctor (Will be empty after the change)

```
SELECT * from system.appointment
```

```
WHERE sId = (&<name=Doctor_id list="select distinct doc.sId from doctor doc  
    order by doc.sId" hint="Doctor Id has 5 digits" required= true type=integer >)
```

הכנסת ת"ז של רופא מומחה בפונקציית העדכון:



The screenshot shows a SQL script in a dark-themed editor. The script is designed to update appointments for a suspended doctor by reassigning them to a random doctor with the same specialties. It includes a comment at the top: "--Move the appointments that belong to the suspended doctor to a random doctor with the same Specialties". The script uses a subquery to select a random doctor ID from the same specialty group. A "Variables" dialog box is open on the right, showing a list of doctor IDs from 10001 to 10010, with 10004 selected. The dialog also shows the variable name "Doctor_id" and an "OK" button.

```
--Move the appointments that belong to the suspended doctor to a random doctor with the same Specialties  
UPDATE system.appointment  
SET sId = (  
    SELECT sId FROM (  
        SELECT d.sId  
        FROM system.doctor d  
        WHERE d.Specialties = (  
            SELECT Specialties  
            FROM system.doctor  
            WHERE sId = (&<name=Doctor_id list="select distinct doc.sId from doctor doc order by doc.sId" hint="Doctor Id has 5 digits" required= true type=integer >)  
        )  
        AND d.sId <> &Doctor_id  
        ORDER BY dbms_random.value  
    )  
    WHERE ROWNUM = 1  
)  
WHERE sId = &Doctor_id;
```

| Name | Value |
|-----------|-------|
| Doctor_id | 10004 |
| | 10001 |
| | 10002 |
| | 10003 |
| | 10004 |
| | 10005 |
| | 10006 |
| | 10007 |
| | 10008 |
| | 10009 |
| | 10010 |

רופאים עם אותה מומחיות כמו הרופא המומחה:

```
--View the doctors with the same Specialties as the suspended doctor
SELECT * from system.doctor d
WHERE d.Specialties = (
    SELECT Specialties
    FROM system.doctor
    WHERE sId = (<name=Doctor_id list="select distinct doc.sId from doctor doc order by doc.sId" hint="Doctor Id has 5 digits" required= true type=integer >)
)
AND d.sId <> sDoctor_id
```

| | LICENSE | SPECIALTIES | SID |
|----|---------|-------------|-------|
| 1 | D757117 | Dentist | 43931 |
| 2 | E209644 | Dentist | 62433 |
| 3 | O066493 | Dentist | 81284 |
| 4 | M965314 | Dentist | 73373 |
| 5 | H212872 | Dentist | 79819 |
| 6 | X325799 | Dentist | 31696 |
| 7 | X491823 | Dentist | 25922 |
| 8 | S679996 | Dentist | 87909 |
| 9 | P768257 | Dentist | 68296 |
| 10 | T588863 | Dentist | 46150 |
| 11 | 799247 | Dentist | 44156 |
| 12 | F170783 | Dentist | 10012 |
| 13 | J088247 | Dentist | 13261 |
| 14 | O224323 | Dentist | 69880 |
| 15 | K392960 | Dentist | 31845 |
| 16 | N449816 | Dentist | 23991 |
| 17 | A353940 | Dentist | 32397 |
| 18 | B356800 | Dentist | 50906 |
| 19 | L133155 | Dentist | 84301 |
| 20 | L259846 | Dentist | 70748 |
| 21 | D965174 | Dentist | 91660 |
| 22 | W006606 | Dentist | 95541 |
| 23 | Z569941 | Dentist | 96640 |
| 24 | P260530 | Dentist | 32588 |
| 25 | N481123 | Dentist | 74872 |

פגישות של הרופא המושהה לפני העדכון:

```
--View the appointments of the suspended doctor (Will be empty after the change)
SELECT * from system.appointment
WHERE sId = (<name=Doctor_id list="select distinct doc.sId from doctor doc order by doc.sId" hint="Doctor Id has 5 digits" required= true type=integer >)
```

| | ADATE | APPOINTMENTID | SID | CID |
|---|------------|---------------|-------|-----|
| 1 | 01/03/2026 | 52874 | 10010 | 648 |
| 2 | 29/12/2025 | 65466 | 10010 | 250 |
| 3 | 31/01/2029 | 34362 | 10010 | 134 |

פגישות של הרופא המושהה לאחר העדכון:

```
--View the appointments of the suspended doctor (Will be empty after the change)
SELECT * from system.appointment
WHERE sId = (<name=Doctor_id list="select distinct doc.sId from doctor doc order by doc.sId" hint="Doctor Id has 5 digits" required= true type=integer >)
```

| | ADATE | APPOINTMENTID | SID | CID |
|--|-------|---------------|-----|-----|
|--|-------|---------------|-----|-----|

שאלתה 2 עם פרמטר:

הסבר:

נרצה לדעת בתוך תקופת זמן מסויימת אילו מטופלים טופלו בסוג טיפול מסויים.

מאפשר הכנסת טווח תאריכים וכן סוג טיפול והאם למיין את הרשימה בסדר עולה או יורד

קוד:

SELECT DISTINCT

p.cId ,p.cName,p.cGender,a.aDate,t.tType,t.Price

FROM system.patient p

JOIN system.appointment a ON p.cId = a.cId

JOIN system.tpreformedina tpia ON a.AppointmentID = tpia.AppointmentID

JOIN system.treatment t ON tpia.tId = t.tId

WHERE a.aDate BETWEEN &<name=start_date hint="Enter start date (dd/mm/yyyy)" type=date>

AND &<name=end_date hint="Enter end date (dd/mm/yyyy)" type=date>

AND t.tType IN (&<name=treatment_types list="Rehabilitation','Orthodontics',
'Aesthetic'" multiselect="true" required=true>)

ORDER BY p.cId &<name="Desc or Asc order" checkbox="desc,asc">;

Result using asc:

SQL Output Statistics

```
SELECT DISTINCT
  p.cId ,p.cName,p.cGender,a.aDate,t.tType,t.Price
FROM system.patient p
JOIN system.appointment a ON p.cId = a.cId
JOIN system.tpreformedina tpia ON a.AppointmentID = tpia.AppointmentID
JOIN system.treatment t ON tpia.tId = t.tId
WHERE a.aDate BETWEEN &<name=start_date hint="Enter start date (dd/mm/yyyy)" type=date>
      AND &<name=end_date hint="Enter end date (dd/mm/yyyy)" type=date>
      AND t.tType IN (&<name=treatment_types list="Rehabilitation','Orthodontics',
'Aesthetic'" multiselect="true" required=true>)
ORDER BY p.cId &<name="Desc or Asc order" checkbox="desc,asc">;
```

| | CID | CNAME | CGENDER | ADATE | TTYPE | PRICE |
|----|-----|-------------------|---------|------------|----------------|-------|
| 1 | 152 | Cole Bernard | F | 18/01/2024 | Rehabilitation | 4955 |
| 2 | 219 | Brittany Guerra | M | 09/08/2024 | Rehabilitation | 4332 |
| 3 | 259 | Cora Maddox | M | 18/07/2024 | Rehabilitation | 14537 |
| 4 | 303 | Beau Ewing | M | 18/11/2024 | Aesthetic | 3528 |
| 5 | 309 | Pearl Warner | M | 05/04/2024 | Aesthetic | 5749 |
| 6 | 309 | Pearl Warner | M | 05/04/2024 | Aesthetic | 8510 |
| 7 | 309 | Pearl Warner | M | 05/04/2024 | Aesthetic | 10354 |
| 8 | 309 | Pearl Warner | M | 05/04/2024 | Rehabilitation | 13998 |
| 9 | 309 | Pearl Warner | M | 05/04/2024 | Rehabilitation | 14991 |
| 10 | 314 | Connor Gardner | M | 21/12/2024 | Rehabilitation | 10860 |
| 11 | 324 | Addison Tran | M | 19/10/2024 | Aesthetic | 3162 |
| 12 | 324 | Addison Tran | M | 19/10/2024 | Aesthetic | 10200 |
| 13 | 387 | Jesse Dominguez | F | 09/03/2024 | Aesthetic | 6242 |
| 14 | 412 | Amaya Watson | F | 12/07/2024 | Rehabilitation | 91 |
| 15 | 468 | Giselle Jimenez | M | 23/01/2024 | Rehabilitation | 6749 |
| 16 | 495 | Hyatt Gay | F | 18/06/2024 | Rehabilitation | 9141 |
| 17 | 553 | Madison Lott | M | 17/02/2024 | Aesthetic | 10489 |
| 18 | 553 | Madison Lott | M | 17/02/2024 | Rehabilitation | 1035 |
| 19 | 572 | Brady Potts | F | 15/12/2024 | Aesthetic | 12652 |
| 20 | 618 | Reagan Franks | F | 10/11/2024 | Aesthetic | 4231 |
| 21 | 618 | Reagan Franks | F | 10/11/2024 | Aesthetic | 11901 |
| 22 | 624 | Benjamin Joyce | F | 27/04/2024 | Aesthetic | 3439 |
| 23 | 624 | Benjamin Joyce | F | 27/04/2024 | Rehabilitation | 4366 |
| 24 | 676 | Madison Madden | F | 21/01/2024 | Aesthetic | 10105 |
| 25 | 698 | Blythe Stephenson | F | 19/03/2024 | Rehabilitation | 14785 |
| 26 | 717 | Megan Molina | F | 28/07/2024 | Aesthetic | 5821 |
| 27 | 743 | Shellie Burke | F | 10/08/2024 | Aesthetic | 11926 |
| 28 | 833 | Jordan Mathis | M | 16/05/2024 | Aesthetic | 11068 |
| 29 | 885 | Tate Wolfe | F | 20/09/2024 | Rehabilitation | 9004 |

Variables

| Name | Value |
|-------------------|-----------------------------|
| start_date | 01/01/2024 |
| end_date | 01/01/2025 |
| treatment_types | Rehabilitation','Aesthetic' |
| Desc or Asc order | <input type="checkbox"/> |

Enter start date (dd/mm/yyyy)

Result using desc:

The screenshot shows a database query interface. At the top, a SQL query is displayed. Below it, a table of results is shown. A 'Variables' dialog box is open, showing the values of variables used in the query.

SQL Query:

```
SELECT DISTINCT
  p.cId, p.cName, p.cGender, a.aDate, t.tType, t.Price
FROM system.patient p
JOIN system.appointment a ON p.cId = a.cId
JOIN system.treatment t ON a.AppointmentID = t.AppointmentID
WHERE a.aDate BETWEEN (<name=start_date hint="Enter start date (dd/mm/yyyy)" type=date>
  AND <name=end_date hint="Enter end date (dd/mm/yyyy)" type=date>)
AND t.tType IN (<name=treatment_types list="Rehabilitation','Orthodontics','Aesthetic'" multiselect="true" required="true">)
ORDER BY p.cId <name="Desc or Asc order" checkbox="desc,asc">;
```

Results Table:

| ID | CNAME | GENDER | AADATE | TTYPE | PRICE |
|----|-----------------------|--------|------------|----------------|-------|
| 1 | 2006 Fiona Anderson | F | 16/08/2024 | Aesthetic | 14902 |
| 2 | 984 Ashley Wilcox | F | 24/09/2024 | Rehabilitation | 7383 |
| 3 | 975 Brody Alvarado | M | 12/12/2024 | Aesthetic | 1317 |
| 4 | 941 Arden Riley | M | 02/04/2024 | Aesthetic | 6273 |
| 5 | 941 Arden Riley | M | 02/04/2024 | Aesthetic | 10025 |
| 6 | 890 Regina Puckett | F | 19/09/2024 | Rehabilitation | 1259 |
| 7 | 885 Tate Wolfe | F | 20/09/2024 | Rehabilitation | 9004 |
| 8 | 833 Jordan Mathis | M | 16/05/2024 | Aesthetic | 11068 |
| 9 | 743 Shellie Burke | F | 10/08/2024 | Aesthetic | 11926 |
| 10 | 717 Megan Molina | F | 28/07/2024 | Aesthetic | 5821 |
| 11 | 698 Blythe Stephenson | F | 19/03/2024 | Rehabilitation | 14785 |
| 12 | 676 Madison Madden | F | 21/01/2024 | Aesthetic | 10105 |
| 13 | 624 Benjamin Joyce | F | 27/04/2024 | Aesthetic | 3439 |
| 14 | 624 Benjamin Joyce | F | 27/04/2024 | Rehabilitation | 4366 |
| 15 | 618 Reagan Franks | F | 10/11/2024 | Aesthetic | 4231 |
| 16 | 618 Reagan Franks | F | 10/11/2024 | Aesthetic | 11901 |
| 17 | 572 Brady Potts | F | 15/12/2024 | Aesthetic | 12552 |
| 18 | 553 Madison Lott | M | 17/02/2024 | Aesthetic | 10489 |
| 19 | 553 Madison Lott | M | 17/02/2024 | Rehabilitation | 1035 |
| 20 | 495 Hyatt Gay | F | 18/06/2024 | Rehabilitation | 9141 |
| 21 | 468 Giselle Jimenez | M | 23/01/2024 | Rehabilitation | 6749 |
| 22 | 412 Amaya Watson | F | 12/07/2024 | Rehabilitation | 91 |
| 23 | 387 Jesse Dominguez | F | 09/03/2024 | Aesthetic | 6242 |
| 24 | 324 Addison Tran | M | 19/10/2024 | Aesthetic | 3162 |
| 25 | 324 Addison Tran | M | 19/10/2024 | Aesthetic | 10200 |
| 26 | 314 Connor Gardner | M | 21/12/2024 | Rehabilitation | 10960 |
| 27 | 309 Pearl Warner | M | 05/04/2024 | Aesthetic | 5749 |
| 28 | 309 Pearl Warner | M | 05/04/2024 | Aesthetic | 8510 |
| 29 | 309 Pearl Warner | M | 05/04/2024 | Aesthetic | 10354 |

Variables Dialog:

| Name | Value |
|-------------------|-------------------------------------|
| start_date | 01/01/2024 |
| end_date | 01/01/2025 |
| treatment_types | Rehabilitation', 'Aesthetic' |
| Desc or Asc order | <input checked="" type="checkbox"/> |

Enter start date (dd/mm/yyyy)

שאילתה 3 עם פרמטר:

הסבר:

לצורך תרגולת בוחן פתע של מס הכנסה - המזכירות צריכות להיות מתורגלות לשלוף נתונים על כל פצינט

- אז השאילתה תחזיר לי פרטי מטופל מסוים, הטיפולים שלו ומתי התור שלו לטיפול

קוד:

SELECT

system.p.cId AS PatientID,

system.p.cName AS PatientName,

system.t.tId AS TreatmentID,

system.t.tType AS TreatmentType,

system.a.aDate AS AppointmentDate

FROM

system.Patient p

JOIN

system.Appointment a ON system.p.cId = system.a.cId

JOIN

system.TPreformedInA tp ON system.a.AppointmentID =
system.tp.AppointmentID

JOIN

system.Treatment t ON system.tp.tId = system.t.tId

WHERE

system.p.cId = &list

ORDER BY

system.a.aDate;

תוצאה:

SQL Output Statistics

```
SELECT
  system.p.cId AS PatientID,
  system.p.cName AS PatientName,
  system.t.tId AS TreatmentID,
  system.t.tType AS TreatmentType,
  system.a.aDate AS AppointmentDate
FROM
  system.Patient p
JOIN
  system.Appointment a ON system.p.cId = system.a.cId
JOIN
  system.TPreformedInA tp ON system.a.AppointmentID = system.tp.AppointmentID
JOIN
  system.Treatment t ON system.tp.tId = system.t.tId
WHERE
  system.p.cId = (&name=Patient_id list="select distinct p.cId from Patient p order by p.cId" hint="Patient Id has 5 digits" required= true type=integer >)
ORDER BY
  system.a.aDate;
```

Variables

| Name | Value |
|------------|-------|
| Patient_id | 5000 |

OK Cancel Clear

Patient Id has 5 digits

| | PATIENTID | PATIENTNAME | TREATMENTID | TREATMENTTYPE | APPOINTMENTDATE |
|---|-----------|----------------|-------------|---------------|-----------------|
| 1 | 20006 | Fiona Anderson | 86775 | Aesthetic | 06/05/2023 |
| 2 | 20006 | Fiona Anderson | 89835 | Orthodontics | 16/07/2024 |
| 3 | 20006 | Fiona Anderson | 64435 | Aesthetic | 16/08/2024 |
| 4 | 20006 | Fiona Anderson | 87568 | Orthodontics | 16/08/2024 |
| 5 | 20006 | Fiona Anderson | 22389 | Orthodontics | 05/08/2028 |

שאלתה 4 עם פרמטר:

הסבר:

השאלתה מוצאת דוקטורים שעובדים בסוף שבוע בחודש מסוים ומספקים טיפולים שעולים יותר מסכום כלשהו

קוד:

SELECT

s.sName AS DoctorName,

d.Specialties,

a.aDate,

TO_CHAR(a.aDate, 'DAY') AS DayOfWeek,

t.tType,

t.Price


```

FROM system.staff s

JOIN system.doctor d ON s.sId = d.sId

JOIN system.appointment a ON d.sId = a.sId

JOIN system.tpreformedina tpia ON a.AppointmentID = tpia.AppointmentID

JOIN system.treatment t ON tpia.tId = t.tId

WHERE a.aDate BETWEEN &<name=month_start hint="Enter first day of month
(YYYY-MM-01)" type=date>

AND LAST_DAY(&<name=month_start hint="Enter first day of month
(YYYY-MM-01)" type=date>)

AND TO_CHAR(a.aDate, 'DY') IN ('SAT', 'SUN')

AND t.Price > &<name=min_price hint="Enter minimum treatment price"
type=INTEGER>

ORDER BY a.aDate, s.sName;

```

תוצאה:

The screenshot shows a SQL IDE with a query window, a results window, and a 'Variables' dialog box.

SQL Query:

```

SELECT
  s.sName AS DoctorName,
  d.Specialties,
  a.aDate,
  TO_CHAR(a.aDate, 'DAY', 'NLS_DATE_LANGUAGE=ENGLISH') AS DayOfWeek,
  t.tType,
  t.Price
FROM system.staff s
JOIN system.doctor d ON s.sId = d.sId
JOIN system.appointment a ON d.sId = a.sId
JOIN system.tpreformedina tpia ON a.AppointmentID = tpia.AppointmentID
JOIN system.treatment t ON tpia.tId = t.tId
WHERE a.aDate BETWEEN &<name=start_date hint="Enter start date (dd/mm/yyyy)" type=date>
AND &<name=end_date hint="Enter end date (dd/mm/yyyy)" type=date>
AND TO_CHAR(a.aDate, 'D', 'NLS_DATE_LANGUAGE=ENGLISH') IN ('5', '7') -- 1 for Sunday, 7 for Saturday
AND t.Price > &<name=min_price hint="Enter minimum treatment price" type=INTEGER>
ORDER BY a.aDate, s.sName;

```

Variables Dialog:

| Name | Value |
|------------|------------|
| start_date | 01/09/2025 |
| end_date | 30/09/2025 |
| min_price | 3000 |

Results Table:

| DOCTORNAME | SPECIALTIES | ADATE | DAYOFWEEK | TTYPE | PRICE |
|------------------|--------------|------------|-----------|----------------|-------|
| 1 Darryl Schmidt | Cosmetic | 04/09/2025 | THURSDAY | Aesthetic | 7078 |
| 2 Darryl Schmidt | Cosmetic | 04/09/2025 | THURSDAY | Rehabilitation | 3534 |
| 3 Darryl Schmidt | Cosmetic | 04/09/2025 | THURSDAY | Orthodontics | 5043 |
| 4 Chris Brown | Orthodontist | 27/09/2025 | SATURDAY | Orthodontics | 6154 |

אילוצים:

1.

קוד:

--Create a default date for appointments

ALTER TABLE appointment

MODIFY aDate DATE DEFAULT TRUNC(SYSDATE);

INSERT INTO Appointment (AppointmentID, sId, cId) VALUES (39876, 10001,
20001);

select * from appointment

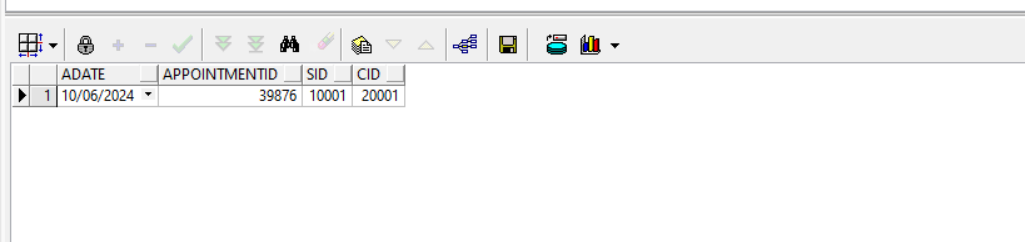
where AppointmentID=39876

create a default date for appointments:

```
--Create a default date for appointments
ALTER TABLE appointment
MODIFY aDate DATE DEFAULT TRUNC(SYSDATE);

INSERT INTO Appointment ( AppointmentID, sId, cId) VALUES ( 39876, 10001, 20001);

select * from appointment
where AppointmentID=39876
```



| | ADATE | APPOINTMENTID | SID | CID |
|---|------------|---------------|-------|-------|
| 1 | 10/06/2024 | 39876 | 10001 | 20001 |

2.

קוד :

--Create a Not Null command

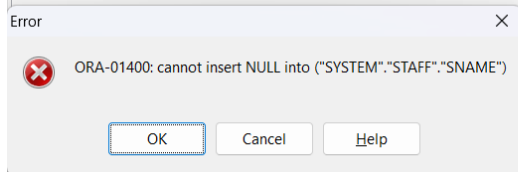
ALTER TABLE staff

MODIFY SNAME VARCHAR2(30) NOT NULL;

```
INSERT INTO Staff (sAddress, sMobile,sMail, sId) VALUES ('123 Main St',  
'123456789', 'john@email.com', 10789);
```

Create a not null command:

```
--Create a Not Null command  
ALTER TABLE staff  
MODIFY SNAME VARCHAR2(30) NOT NULL;  
INSERT INTO Staff (sAddress, sMobile,sMail, sId) VALUES ('123 Main St', '123456789', 'john@email.com', 10789);
```



.3

קוד:

--Make sure that phone numbers start with 0

```
ALTER TABLE PATIENT
```

```
ADD CONSTRAINT check_mobile_patient
```

```
CHECK (CMOBILE LIKE '0%');
```

```
INSERT INTO Patient (cBirthYear, cAddress, cName, cGender, cId, cMobile,  
cMail) VALUES (1990, '456 Oak Ave', 'Bob Smith', 'M', 25671, '987654321',  
'bob@email.com');
```

select * from patient

Make sure that phone number start with 0:

```
SQL    Output    Statistics
--Make sure that phone numbers start with 0
ALTER TABLE PATIENT
ADD CONSTRAINT check_mobile_patient
CHECK (CMOBILE LIKE '0%');

INSERT INTO Patient (cBirthYear, cAddress, cName, cGender, cId, cMobile, cMail) VALUES (1990, '456 Oak Ave', 'Bob Smith', 'M', 25671, '987654321', 'bob@email.com');

select * from patient
```

Error

ORA-02290: check constraint (SYSTEM.CHECK_MOBILE_PATIENT) violated

OK Cancel Help

(no result set)

.4

קוד:

--Make sure treatment price isnt <=0

ALTER TABLE treatment

ADD CONSTRAINT check_price

CHECK (PRICE > 0);

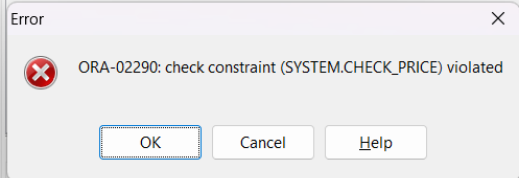
INSERT INTO Treatment (tType, Description, Price, tId, Time) VALUES
('Medication','Antibiotics',-15,60002,0.5);

select * from treatment

Make sure treatment price is valid

```
--Make sure treatment price isnt <=0  
ALTER TABLE treatment  
ADD CONSTRAINT check_price  
CHECK (PRICE > 0);
```

```
INSERT INTO Treatment (tType, Description, Price, tId, Time) VALUES ('Medication','Antibiotics',-15,60002,0.5);  
select * from treatment
```



9876, 10001, 20001);

גיבוי:

