

ארגון בית מרקחת - Pharmacy management

שלב 1 :

תיאור העצת הארגון

נעסוק בארגון בית מרקחת. מטרה של בית מרקחת היא למכור ללקוחות שהם בעצם מטופלים את התרופה המתאימה. לכל מטופל יש הפניה שבה מופיעה רק תרופה אחת (יכול להיות שיש לו כמה הפניות), יש לו גם שם, ת"ז וכתובת. הוא יכול ללכת כדי לקנות אותה בבית מרקחת אחת והיא תמכור לו ויגיש דו"ח של קבלה עם מספר הלקוח, מספר החנות, מספר התרופה והמחיר ששילם הלקוח.

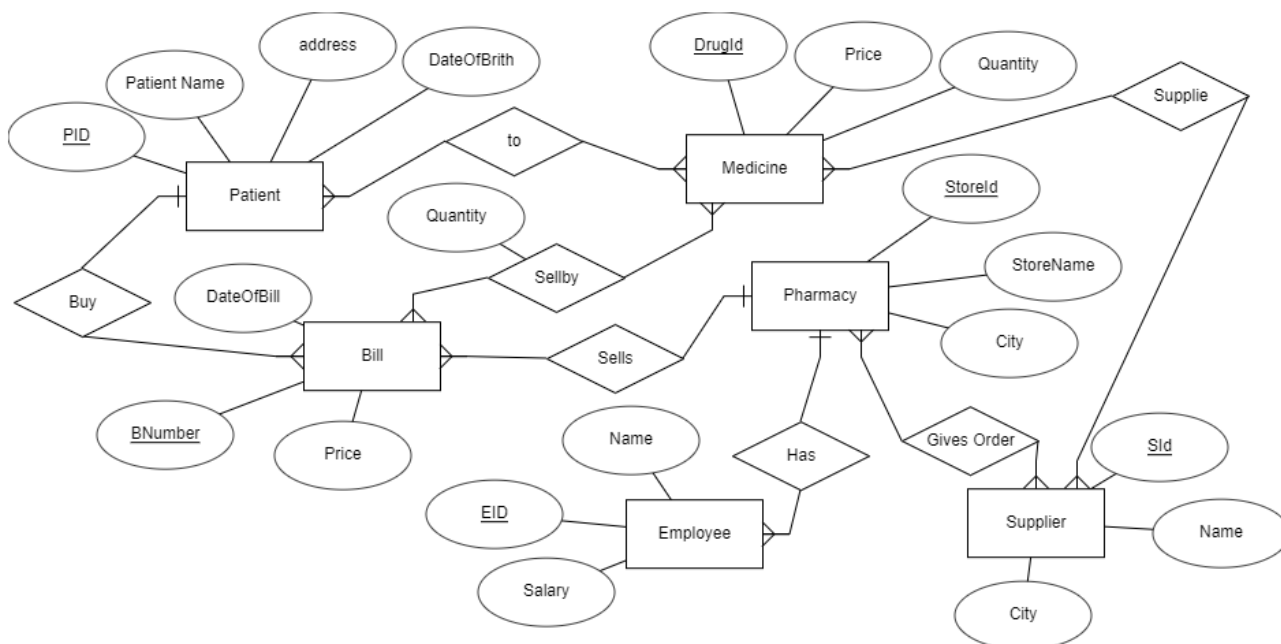
לכל תרופה יש מס תרופה, מחיר, וכמות.

לכל בית מרקחת יש שם של החנות, מס החנות והעיר שבה היא נמצאת.

לבית מרקחת יש גם עובדים וכל העובדים שמורים תחת הישות EMPLOYEE עם שמם, ת"ז שלהם, שם החנות שבה הם עובדים וכמובן השכר שהם מרוויחים.

בית מרקחת גם יכולה ליצור הזמנות לספקי תרופות. לכל ספק יש שם, מספר מסוים, המחיר שהוא מציע והעיר שבה הוא נמצא.

תרשים ERD



הטבלאות המתקבלות:

- **מטופל** (ת"ז, שם, כתובת)
- **תרופה** (מספר תרופה, מחיר, כמות)

- **בית מרקחת**(מספר חנות, שם חנות, עיר)
- **קבלה**(מספר קבלה, מחיר ומספר תרופה)
- **עובד**(ת"ז, שם, שכר)
- **ספק**(מספר ספק, שם, עיר)

השם והכתובת, התאריך לידה של המטופל תלויות בת"ז שלו- מקיים 3NF.

המחיר של התרופה והכמות שיש ממנה תלויים במספר שלו- NF3.

שם החנות ועיר של בית מרקחת תלויים במספר מזהה של החנות- מקיים NF3.

המחיר של הקבלה ומספר התרופה תלויים במספר הקבלה-מקיים NF3.

השם והכתובת של המטופל תלויות בת"ז שלו- מקיים 3NF.

השם והשכר של עובד תלויים בת"ז שלו- NF3.

SQL טבלאות

```
CREATE TABLE Patient
(
  PID NUMERIC(10) NOT NULL,
  Patient_Name VARCHAR(15) NOT NULL,
  address VARCHAR(20) NOT NULL,
  DateOfBrith DATE NOT NULL,
  PRIMARY KEY (PID)
);
```

```
CREATE TABLE Medicine
(
  DrugId NUMERIC(5) NOT NULL,
  Price NUMERIC(10) NOT NULL,
  Quantity NUMERIC(15) NOT NULL,
  PRIMARY KEY (DrugId)
);
```

```
CREATE TABLE Supplier
(
  SId NUMERIC(7) NOT NULL,
  Name VARCHAR(15) NOT NULL,
  City VARCHAR(10) NOT NULL,
  PRIMARY KEY (SId)
);
```

```
CREATE TABLE Pharmacy
(
  StoreId NUMERIC(3) NOT NULL,
  StoreName VARCHAR(15) NOT NULL,
  City VARCHAR(10) NOT NULL,
  PRIMARY KEY (StoreId)
);
```

```
CREATE TABLE Bill
```

```
(
  BNumber NUMERIC(6) NOT NULL,
  Price NUMERIC(6) NOT NULL,
  DateOfBill DATE NOT NULL,
  StoreId NUMERIC(3) NOT NULL,
  PID NUMERIC(10) NOT NULL,
  PRIMARY KEY (BNumber),
  FOREIGN KEY (StoreId) REFERENCES Pharmacy(StoreId),
  FOREIGN KEY (PID) REFERENCES Patient(PID)
);
```

CREATE TABLE tto

```
(
  PID NUMERIC(10) NOT NULL,
  DrugId NUMERIC(5) NOT NULL,
  PRIMARY KEY (PID, DrugId),
  FOREIGN KEY (PID) REFERENCES Patient(PID),
  FOREIGN KEY (DrugId) REFERENCES Medicine(DrugId)
);
```

CREATE TABLE Gives_Order

```
(
  StoreId NUMERIC(3) NOT NULL,
  SId NUMERIC(7) NOT NULL,
  PRIMARY KEY (StoreId, SId),
  FOREIGN KEY (StoreId) REFERENCES Pharmacy(StoreId),
  FOREIGN KEY (SId) REFERENCES Supplier(SId)
);
```

CREATE TABLE Sellby

```
(
  Quantity NUMERIC(9) NOT NULL,
  DrugId NUMERIC(5) NOT NULL,
  BNumber NUMERIC(6) NOT NULL,
  PRIMARY KEY (DrugId, BNumber),
  FOREIGN KEY (DrugId) REFERENCES Medicine(DrugId),
  FOREIGN KEY (BNumber) REFERENCES Bill(BNumber)
);
```

CREATE TABLE Supplie

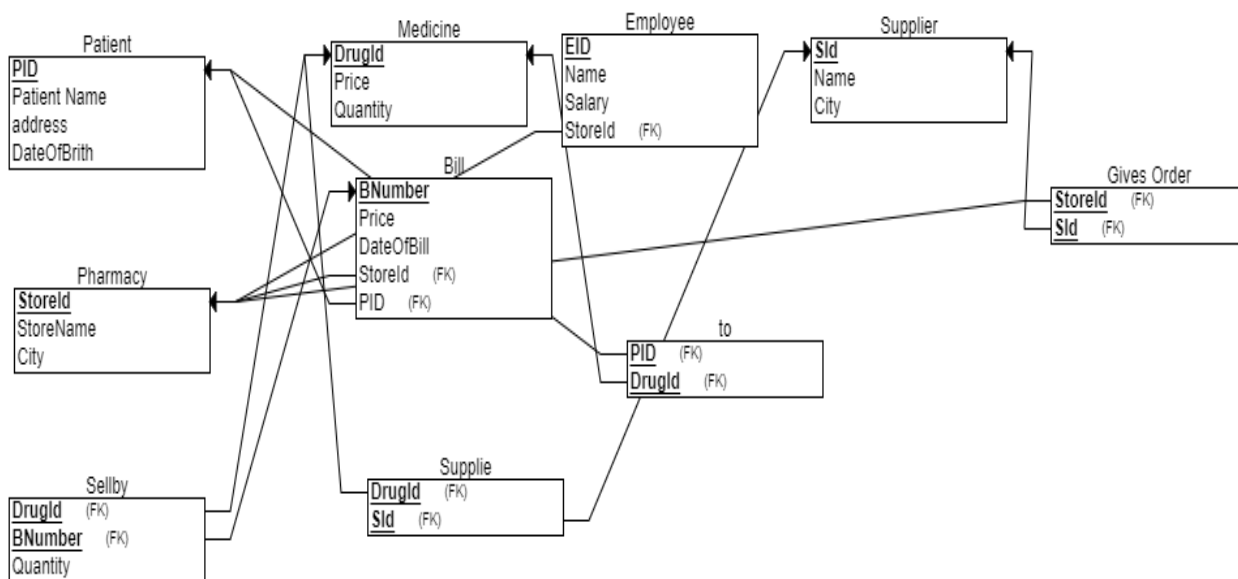
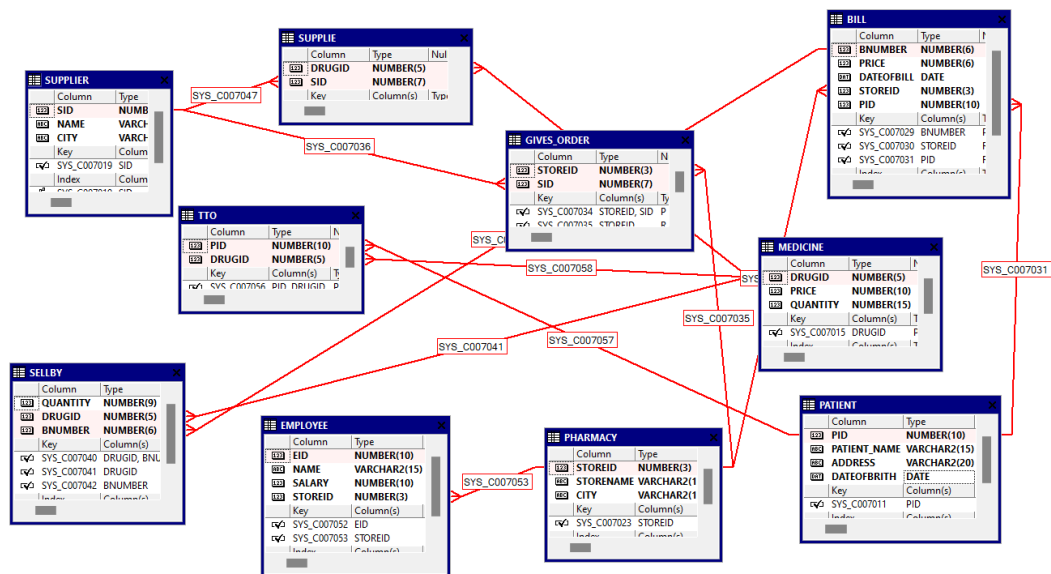
```
(
  DrugId NUMERIC(5) NOT NULL,
  SId NUMERIC(7) NOT NULL,
  PRIMARY KEY (DrugId, SId),
  FOREIGN KEY (DrugId) REFERENCES Medicine(DrugId),
  FOREIGN KEY (SId) REFERENCES Supplier(SId)
);
```

CREATE TABLE Employee

```
(
  EID NUMERIC(10) NOT NULL,
  Name VARCHAR(15) NOT NULL,
  Salary NUMERIC(10) NOT NULL,
  StoreId NUMERIC(3) NOT NULL,
  PRIMARY KEY (EID),
  FOREIGN KEY (StoreId) REFERENCES Pharmacy(StoreId)
```

);

תרשים DSD



אכלוס הטבלאות

Data generation-1

Owner

YOU DITH

Table

PATIENT

Number of records

400

Name	Type	Size	Data
PID	NUMBER	10	[0000000000]
PATIENT_NAME	VARCHAR2	15	FirstName '-' LastName
ADDRESS	VARCHAR2	20	Address1
DATEOFBRITH	DATE	0	Random(01/01/1930, 26/05/2024)
*			

```

insert into YOU DITH.PATIENT (PID, PATIENT_NAME, ADDRESS, DATEOFBRITH)
values (6446957289, 'Nicky-Kenoly', '71 Crouse Street', to_date('27-12-1948', 'dd-mm-yyyy'));

insert into YOU DITH.PATIENT (PID, PATIENT_NAME, ADDRESS, DATEOFBRITH)
values (2411433345, 'Gladys-Rollins', '89 Mos Street', to_date('20-04-2017', 'dd-mm-yyyy'));

insert into YOU DITH.PATIENT (PID, PATIENT_NAME, ADDRESS, DATEOFBRITH)
values (1407983264, 'Lena-McDonald', '42 Nicholson Road', to_date('27-12-2011', 'dd-mm-yyyy'));

insert into YOU DITH.PATIENT (PID, PATIENT_NAME, ADDRESS, DATEOFBRITH)
values (3334183303, 'Anjelica-Curtis', '95 Horsens Drive', to_date('22-08-2003', 'dd-mm-yyyy'));

insert into YOU DITH.PATIENT (PID, PATIENT_NAME, ADDRESS, DATEOFBRITH)
values (5872968892, 'Yaphet-Belle', '88 Lake Bluff Road', to_date('05-03-2008', 'dd-mm-yyyy'));

insert into YOU DITH.PATIENT (PID, PATIENT_NAME, ADDRESS, DATEOFBRITH)
values (3366138955, 'Melba-Wahlberg', '69 Rupert Drive', to_date('23-12-2016', 'dd-mm-yyyy'));

insert into YOU DITH.PATIENT (PID, PATIENT_NAME, ADDRESS, DATEOFBRITH)
values (2944364735, 'Mark-MacLachlan', '24 Drogenbos Drive', to_date('31-10-1993', 'dd-mm-yyyy'));

insert into YOU DITH.PATIENT (PID, PATIENT_NAME, ADDRESS, DATEOFBRITH)
values (0678754032, 'Dom-Vaughan', '1 Alston Ave', to_date('25-07-1961', 'dd-mm-yyyy'));

insert into YOU DITH.PATIENT (PID, PATIENT_NAME, ADDRESS, DATEOFBRITH)
values (9166122700, 'Famke-Richter', '43 Kapanka Street', to_date('27-04-2004', 'dd-mm-yyyy'));

insert into YOU DITH.PATIENT (PID, PATIENT_NAME, ADDRESS, DATEOFBRITH)
values (1406223506, 'Benjamin-McKenn', '62 Grier Street', to_date('26-08-1963', 'dd-mm-yyyy'));

insert into YOU DITH.PATIENT (PID, PATIENT_NAME, ADDRESS, DATEOFBRITH)
values (3636414477, 'Julia-Buffalo', '48 Long Island City ', to_date('15-04-1959', 'dd-mm-yyyy'));

insert into YOU DITH.PATIENT (PID, PATIENT_NAME, ADDRESS, DATEOFBRITH)
values (5289053236, 'Anne-Richards', '179 Tcheky Road', to_date('28-12-1964', 'dd-mm-yyyy'));

insert into YOU DITH.PATIENT (PID, PATIENT_NAME, ADDRESS, DATEOFBRITH)
values (9315434495, 'Andie-Quinones', '30 Morioka Drive', to_date('11-02-2009', 'dd-mm-yyyy'));

insert into YOU DITH.PATIENT (PID, PATIENT_NAME, ADDRESS, DATEOFBRITH)
values (6922336864, 'Diamond-Witt', '64 Stockard Road', to_date('30-07-1967', 'dd-mm-yyyy'));

```

SQL Window - select * from patient;

SQL

Output

Statistics

```
select * from patient;
```

	PID	PATIENT_NAME	ADDRESS	DATEOFBRITH
1	742164	Gordon-Wilkinso	37 Jessef ...	05/07/1980
2	780067	Rip-Tanon	41st Street ...	10/07/2011
3	642121	Linda-Sledge	48 Odense ...	11/01/2014
4	618977	Shannon-Waits	56 Valenci ...	08/11/1968
5	588709	Taryn-Quinones	81 Kennet ...	08/04/1938
6	692283	Patty-Chandler	63 Dorval ...	17/09/2020
7	687356	Marina-Sutherla	6 Vanderb ...	04/05/1979
8	065585	Lindsay-Squier	3 Lithgow ...	03/01/1958
9	229643	Howard-Saucedo	14 Hydera ...	09/10/2008
10	693128	Spike-Lewis	99 Cambri ...	11/10/1998
11	691720	Chet-Bradford	61st Street ...	08/09/2001
12	221324	Jimmy-Marie	41st Street ...	16/01/2004
13	070159	Annette-Remar	28 Swarthi ...	15/04/2005
14	212424	Terence-Hackman	66 Olszyn ...	10/08/1992

PID	PATIENT_NAME	ADDRESS	DATEOFBRITH
6925426578	Harry-Klein	92 Fairuza Street	30-05-1957
5257585934	Andrew-McNarlan	5 Santorso Road	23-04-1992
0130436728	Robby-Arjona	927 Margolyes Street	04-11-2001
7719599545	Irene-Rifkin	145 Horace Drive	06-01-1982
2393391609	Judge-Ferrell	22nd Street	14-11-2003
7107962331	Dylan-Murdock	96 Pirmasens Drive	19-08-1984
9840373341	Andy-Colman	1 Wheel Street	01-11-1946
1304582599	Candice-Shocked	593 Langella Road	17-07-2022
2431270168	Tcheiky-Mohr	671 Womack Ave	19-03-1934
6904378063	Katrin-Furay	82 Liquid Street	04-01-1932
1496939163	Neneh-Levine	76 Monument Road	23-08-1965
4837403375	Avenged-Balk	56 Connick Drive	19-08-1936
8064750045	Bridget-Reubens	74 Salt Blvd	21-05-1997
4569314572	Patti-Field	52 Garr Street	02-05-2013
6963637904	Maria-Kweller	29 Kinnear Ave	09-03-1972
3426931088	Raymond-Guzman	40 DeGraw Blvd	10-07-1951
3867499091	Dianne-Chao	60 Cherry Street	07-03-1938
4850138153	Jay-Rossellini	35 Flower mound Stre	29-12-1930
3649410562	Tramaine-Stampf	229 Irene Drive	11-09-1930
0548287902	Forest-Bugnon	994 Marley Drive	17-09-1939
0507821806	Kirk-Nicholas	94 Makeba Drive	19-08-1955
6774389395	Kay-Rodgers	80 Trumbull Street	22-02-1989
2424948167	Donal-Jackman	16 Marlboro Ave	14-08-1972
4175174885	Marlon-Stills	12nd Street	19-12-1955
7189634783	Chad-Ward	72 Marx Road	06-09-2010
4826736196	Hugh-Shepard	93 Sample Drive	23-06-1962
0322579734	Elisabeth-Parke	628 McGriff Road	11-04-1932
0370021889	Joey-Dourif	12 Doug Road	04-11-2018
3347208999	Jody-Rockwell	880 Kirkwood Drive	15-07-2003
2695056487	Leonardo-McDona	607 Rhea Road	16-12-1975
2607821401	Humberto-Connel	54 Danger Road	24-05-2024
8095733914	Molly-Hewitt	91 Aurora Blvd	30-12-1993
6389435054	Jose-Steiger	53 Salt Lake City Ro	28-08-2010
3461718717	Isaiah-Pressly	59 Prinze Blvd	01-11-1950
6543611674	Ivan-Miles	67 Gordon Drive	23-04-1999

Field Name	Type	Options									
drugid	Number	min:	10000	max:	90000	decimals:	0	blank:	0 %	Σ	×
price	Number	min:	1	max:	100	decimals:	0	blank:	0 %	Σ	×
quantity	Number	min:	1	max:	1000000	decimals:	0	blank:	0 %	Σ	×
+ ADD ANOTHER FIELD		🔮 GENERATE FIELDS USING AI...									

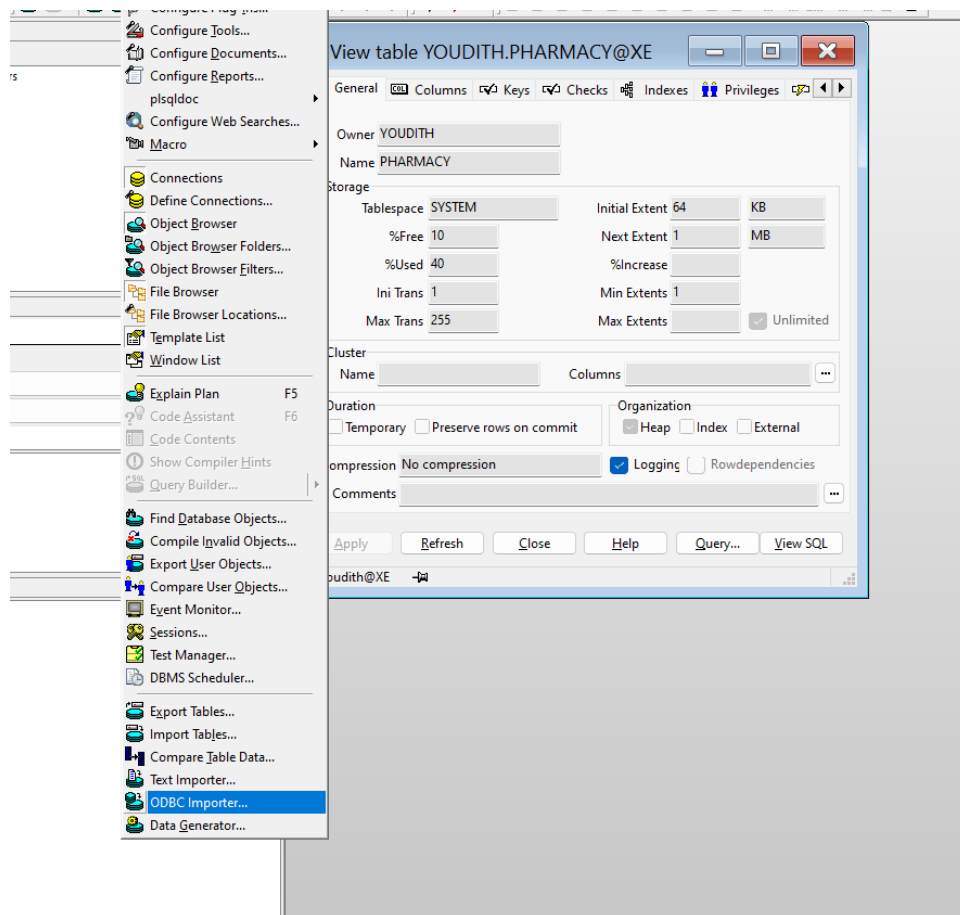
SQL	Output	Statistics
insert into medicine (drugid, price, quantity) values (86743, 92, 98273);		
insert into medicine (drugid, price, quantity) values (76721, 41, 324326);		
insert into medicine (drugid, price, quantity) values (35701, 49, 951580);		
insert into medicine (drugid, price, quantity) values (72968, 63, 500762);		
insert into medicine (drugid, price, quantity) values (23528, 39, 739569);		
insert into medicine (drugid, price, quantity) values (48881, 16, 752680);		
insert into medicine (drugid, price, quantity) values (23689, 75, 645252);		
insert into medicine (drugid, price, quantity) values (12688, 5, 732869);		
insert into medicine (drugid, price, quantity) values (13507, 99, 400012);		
insert into medicine (drugid, price, quantity) values (72257, 61, 809082);		
insert into medicine (drugid, price, quantity) values (52872, 18, 970982);		
insert into medicine (drugid, price, quantity) values (20477, 69, 427175);		
insert into medicine (drugid, price, quantity) values (11437, 22, 732133);		
insert into medicine (drugid, price, quantity) values (71737, 99, 752800);		
insert into medicine (drugid, price, quantity) values (10743, 15, 295092);		
insert into medicine (drugid, price, quantity) values (30026, 20, 736532);		
insert into medicine (drugid, price, quantity) values (37089, 24, 968083);		
insert into medicine (drugid, price, quantity) values (52695, 50, 580641);		
insert into medicine (drugid, price, quantity) values (30453, 89, 770823);		
insert into medicine (drugid, price, quantity) values (22219, 39, 871466);		
insert into medicine (drugid, price, quantity) values (20475, 93, 132045);		
insert into medicine (drugid, price, quantity) values (36108, 76, 884487);		
insert into medicine (drugid, price, quantity) values (20794, 41, 902684);		
insert into medicine (drugid, price, quantity) values (66649, 36, 72748);		
insert into medicine (drugid, price, quantity) values (84010, 90, 850320);		
insert into medicine (drugid, price, quantity) values (70270, 82, 964220);		
insert into medicine (drugid, price, quantity) values (13457, 64, 898823);		
insert into medicine (drugid, price, quantity) values (15884, 2, 390608);		
insert into medicine (drugid, price, quantity) values (42183, 42, 914477);		
insert into medicine (drugid, price, quantity) values (62244, 31, 470433);		
insert into medicine (drugid, price, quantity) values (12276, 88, 69441);		
insert into medicine (drugid, price, quantity) values (66297, 62, 291227);		
insert into medicine (drugid, price, quantity) values (11804, 63, 475977);		
insert into medicine (drugid, price, quantity) values (51158, 69, 659797);		
insert into medicine (drugid, price, quantity) values (54658, 47, 296504);		
insert into medicine (drugid, price, quantity) values (53865, 47, 853533);		
insert into medicine (drugid, price, quantity) values (41674, 26, 972476);		
insert into medicine (drugid, price, quantity) values (88128, 67, 366647);		
insert into medicine (drugid, price, quantity) values (58380, 43, 878077);		
insert into medicine (drugid, price, quantity) values (14361, 94, 865715);		
insert into medicine (drugid, price, quantity) values (64458, 86, 52003);		
insert into medicine (drugid, price, quantity) values (71376, 49, 235951);		
insert into medicine (drugid, price, quantity) values (73050, 9, 219817);		
insert into medicine (drugid, price, quantity) values (47469, 37, 763887);		

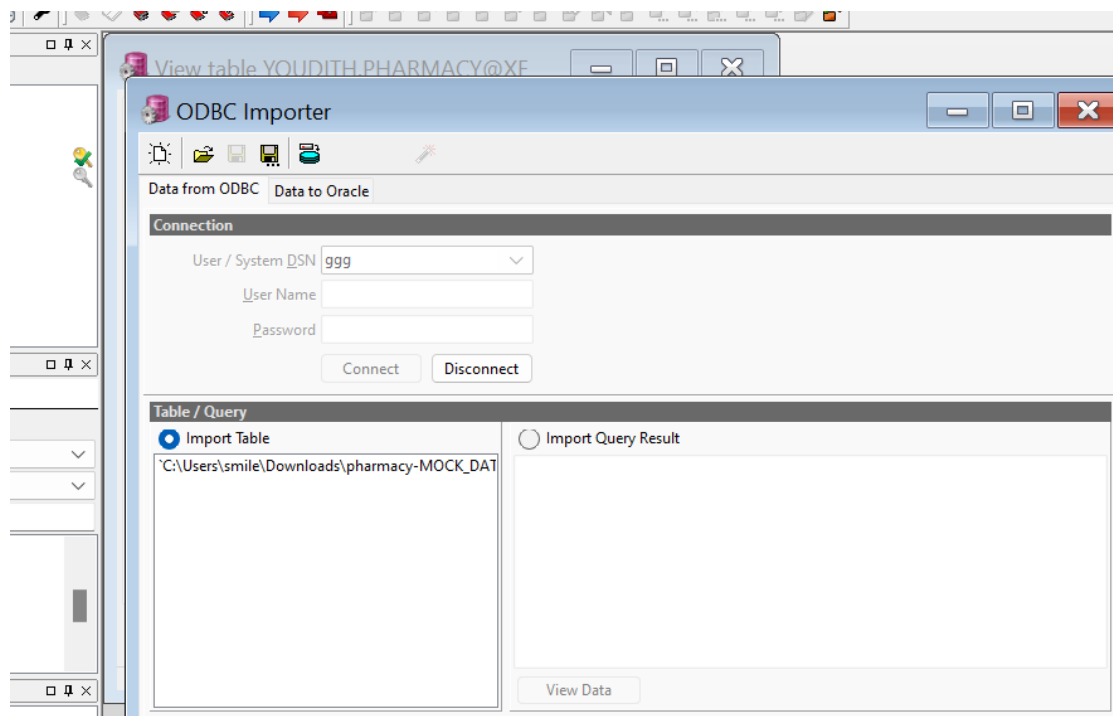
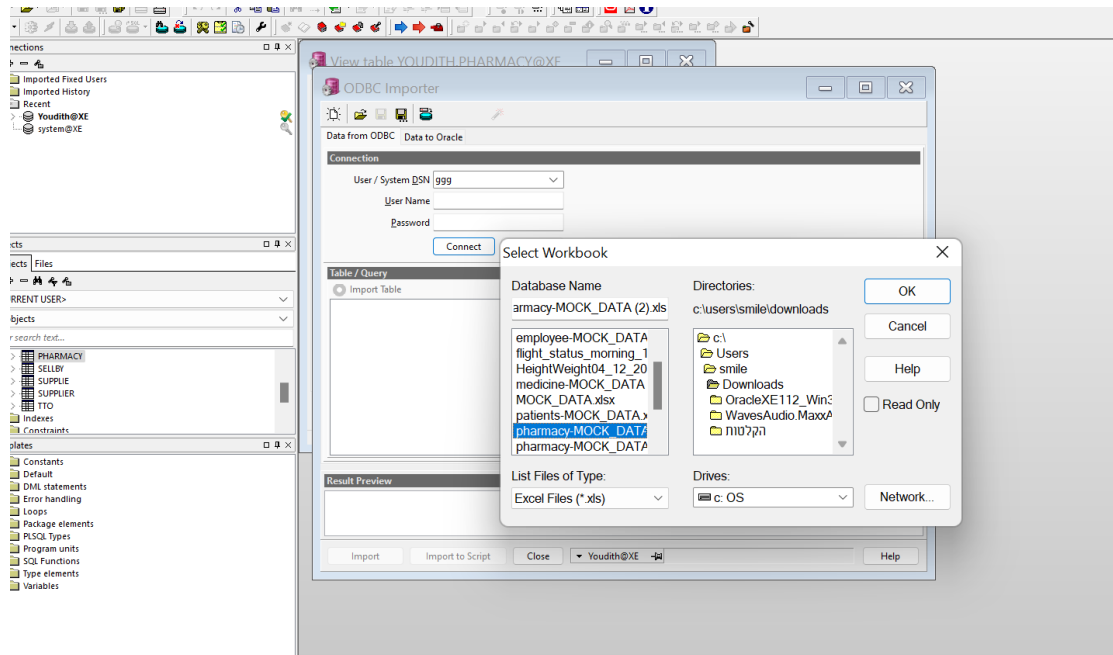
SQL Output Statistics

```
select * from medicine;
```

	DRUGID	PRICE	QUANTITY
1	85592	50	262789
2	12777	14	884212
3	49931	97	990702
4	37716	70	432951
5	89652	10	792719
6	26333	14	445378
7	86375	96	734838
8	60505	20	528061
9	75349	31	187694
10	33442	66	998546
11	20293	47	471296
12	28354	60	708270
13	40223	5	771298
14	51996	10	169922

3- מילוי נתונים מקובץ Excel





SQL Output Statistics				
select t.*, t.rowid from PHARMACY t				
	STOREID	STORENAME	CITY	ROWID
1	55	Beahan-White	ardice	AAAE8MAABAAAK/hAAA ...
2	92	Littel Group	Uppsala	AAAE8MAABAAAK/hAAB ...
3	82	Powlowski LLC	Buzdyak	AAAE8MAABAAAK/hAAC ...
4	62	McCullough	Shengao	AAAE8MAABAAAK/hAAD ...
5	18	Rosen-Harvey	Zaragoza	AAAE8MAABAAAK/hAAE ...
6	73	Bins-Sporer	Roseau	AAAE8MAABAAAK/hAAF ...
7	19	Cassin-Howe	Chengyang	AAAE8MAABAAAK/hAAG ...
8	61	Wilkinson	Taytay	AAAE8MAABAAAK/hAAH ...
9	69	Starren	Alvito	AAAE8MAABAAAK/hAAI ...
10	67	Bode and Sons	Dumb, Sa	AAAE8MAABAAAK/hAAJ ...
11	70	Feest and Sons	Xiaoshi	AAAE8MAABAAAK/hAAK ...
12	9	Hansen LLC	Pesisir	AAAE8MAABAAAK/hAAL ...
13	90	King Inc	Muang Xay	AAAE8MAABAAAK/hAAM ...
14	97	Bergstrom	Hrastnik	AAAE8MAABAAAK/hAAN ...

3-גיבור ושיחרור

