

מיני פרוייקט בבסנ"ת - דו"ח הפרוייקט

מגישות: הודיה אשכנזי, פזית אקבשב.

שם המערכת:

מערכת לגיוס תרומות עבור קק"ל.

תיאור המערכת:

מערכת גיוס התרומות למען קק"ל נועדה לנהל ולעקוב אחר הפעילויות השונות הקשורות לגיוס תרומות בעזרת עובדים וכן ארגון קמפיינים ואירועי הוקרה לתורמי הארגון. המערכת כוללת שש יישויות: בן אדם, תורם, עובד, תרומה, קמפיין ואירוע.

פירוט עבור כל יישות והתפקיד שלה במערכת:

בן-אדם (Person) - יישות אב

תכונות היישות:

- PersonID (Primary Key) - ת"ז
- FirstName - שם פרטי
- LastName - שם משפחה
- Email - כתובת אימייל
- PhoneNumber - מספר טלפון
- Address - כתובת מגורים

עובד (Employee)

יישות שמייצגת את עובדי הארגון ויורשת מיישות בן-אדם

תכונות היישות:

- WorkHours - שעות עבודה
- Seniority - שנות וותק
- HourlyWage - שכר תשלום שעתי
- Position - תפקיד
- EventID - אירוע התרמה בו עבד

תורם (Donor)

יישות שמייצגת את התורמים לארגון ויורשת מיישות בן-אדם

תכונות היישות:

- RegistrationDate - תאריך הרשמה למערכת
- EventID - אירוע התרמה בו השתתף

תרומה (Donation)

יישות שמייצגת את התרומות שנתרמו לארגון

תכונות היישות:

- DonationID (Primary Key) - מזהה תרומה
- DonorID (Foreign Key) - ת"ז תורם
- CampaignID (Foreign Key) - מזהה קמפיין
- PaymentMethod - אופן תשלום התרומה
- Amount - סכום התרומה
- NumOfPayments - מספר תשלומים
- DonationDate - תאריך תרומה

קמפיין (Campaign)

יישות שמייצגת את הקמפיינים שיזם הארגון עבור איסוף תרומות

תכונות היישות:

- CampaignID (Primary Key) - מזהה קמפיין
- CampaignName - שם הקמפיין
- DonationGoal - מטרת התרומה
- StartDate - תאריך תחילת הקמפיין
- EndDate - תאריך סיום הקמפיין

אירוע הוקרה (Event)

יישות שמייצגת את אירועי ההוקרה לתורמים והשקת הקמפיינים אותם יזם הארגון

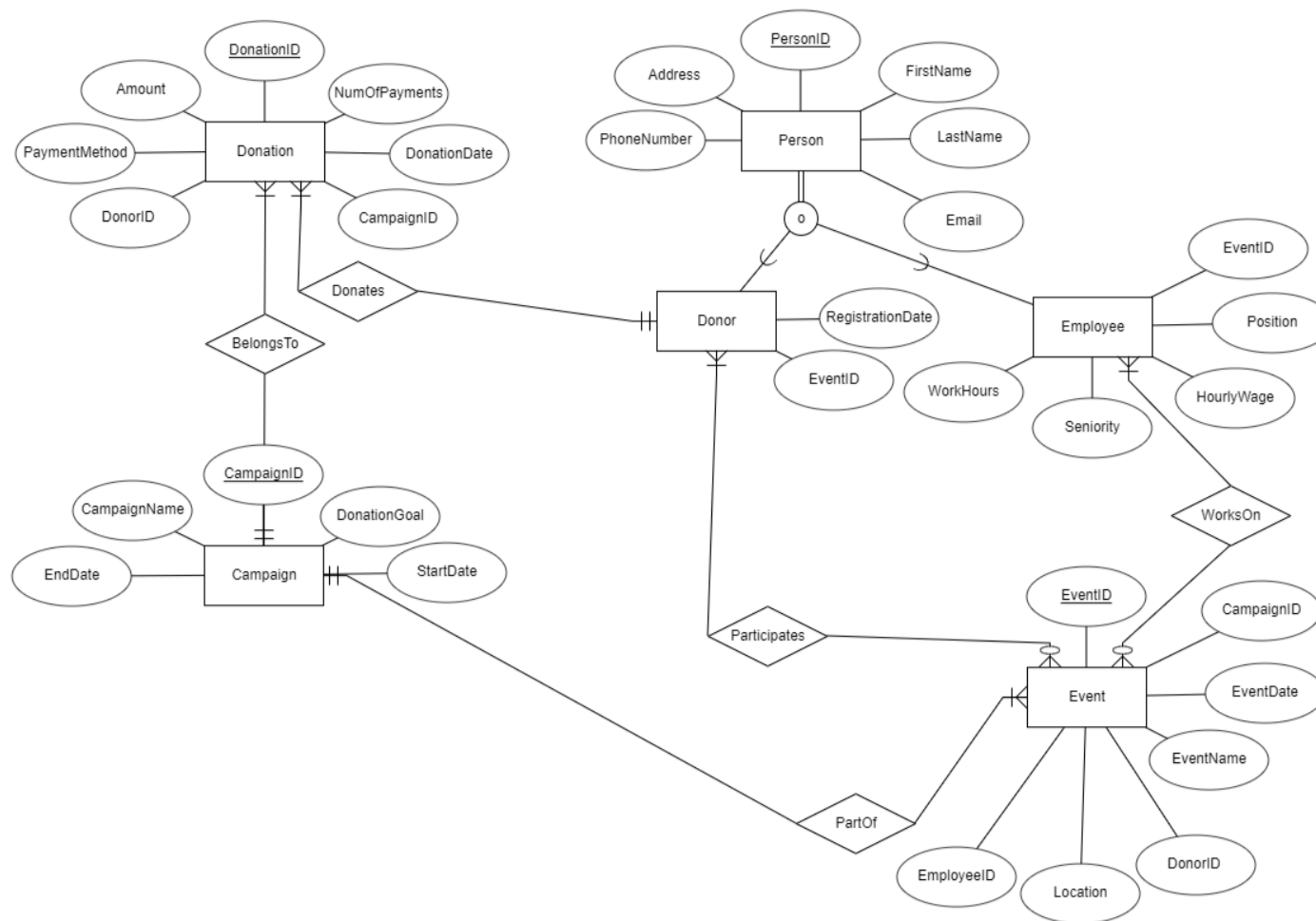
תכונות היישות:

- EventID (Primary Key) - מזהה אירוע
- CampaignID (Foreign Key) - מזהה קמפיין
- EmployeeID - מזהה העובד שעבד באירוע
- DonorID - מזהה התורם שהשתתף באירוע
- EventDate - תאריך האירוע
- EventName - שם האירוע
- Location - מיקום האירוע

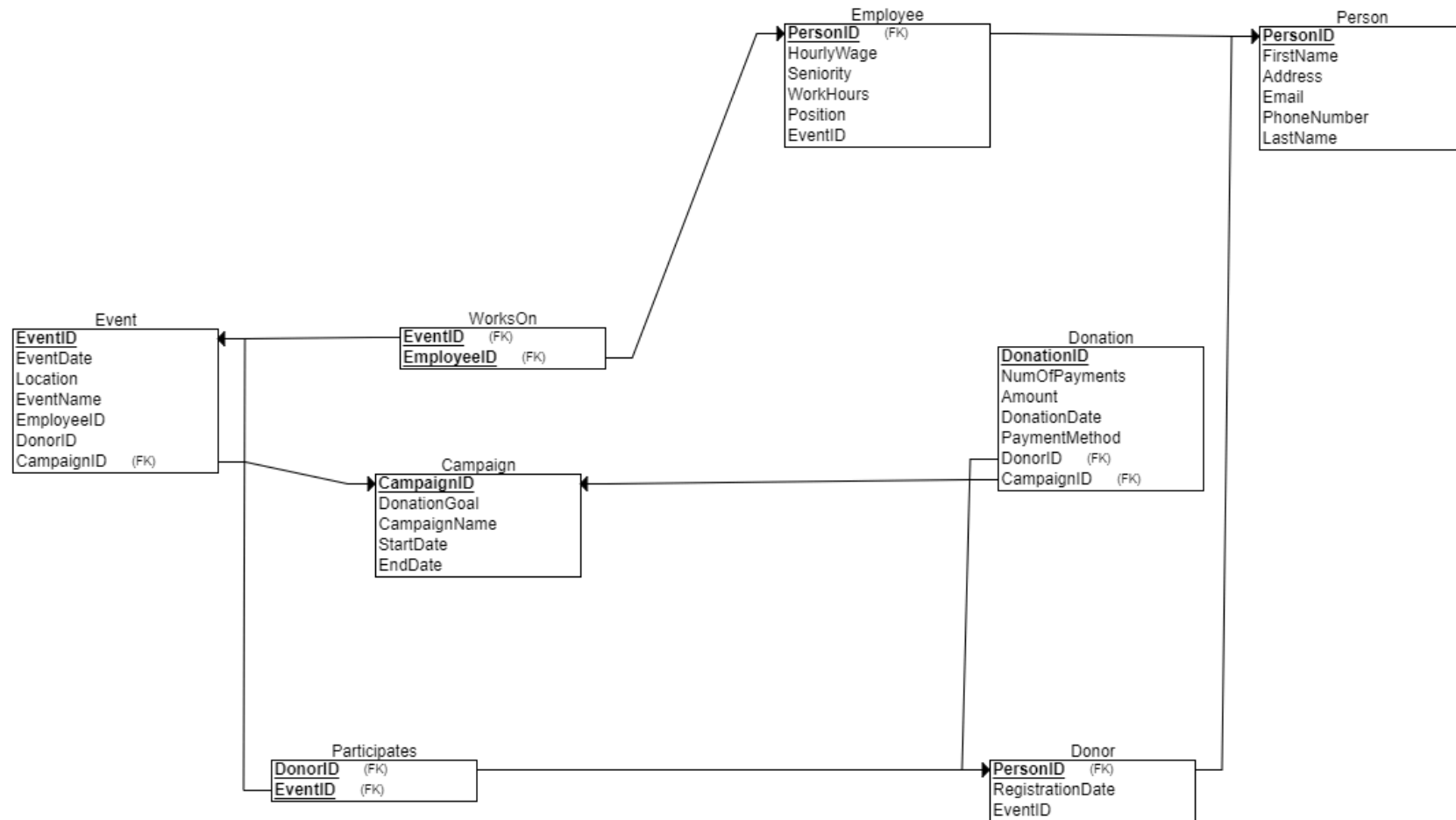
הקשרים בין היישויות:

| שם הקשר | סוג הקשר |
|--------------|--|
| ISA | כל עובד ותורם יורשים מבן-אדם |
| Donates | כל תרומה מקושרת לתורם כל תורם יכול לתרום מספר תרומות ולכן הקשר הוא one-to-many |
| Participates | כל תורם יכול להשתתף בכמה אירועים וכל אירוע מכיל כמה תורמים ולכן הקשר הוא many-to-many |
| PartOf | כל אירוע הוא חלק מקמפיין כל קמפיין יכול לכלול מספר אירועים ולכן הקשר הוא one-to-many |
| BelongsTo | כל תרומה משוייכת לקמפיין כל קמפיין יכול לקבל מספר תרומות ולכן הקשר הוא one-to-many |
| WorksOn | כל עובד יכול לעבוד בכמה אירועים וכל אירוע יכול לכלול כמה עובדים ולכן הקשר הוא many-to-many |

דיאגרמת ERD



סכמת DSD



יצירת הטבלאות

קיבלנו את הסקריפט של יצירת הטבלאות והעתקנו לתוכנת psqldeveloper:

```
CREATE TABLE Person
(
    PersonID NUMERIC(9) NOT NULL,
    FirstName VARCHAR(10) NOT NULL,
    Address VARCHAR(30) NOT NULL,
    Email VARCHAR(25) NOT NULL,
    PhoneNumber VARCHAR(15) NOT NULL,
    LastName VARCHAR(10) NOT NULL,
    PRIMARY KEY (PersonID)
);

CREATE TABLE Campaign
(
    CampaignID NUMERIC(5) NOT NULL,
    DonationGoal VARCHAR(25) NOT NULL,
    CampaignName VARCHAR(25) NOT NULL,
    StartDate DATE NOT NULL,
    EndDate DATE NOT NULL,
    PRIMARY KEY (CampaignID)
);

CREATE TABLE Event
(
    EventID NUMERIC(5) NOT NULL,
    EventDate DATE NOT NULL,
    Location VARCHAR(15) NOT NULL,
    CampaignID NUMERIC(5) NOT NULL,
    EventName VARCHAR(25) NOT NULL,
    EmployeeID NUMERIC(9) NOT NULL,
    DonorID_ NUMERIC(9) NOT NULL,
    PRIMARY KEY (EventID),
    FOREIGN KEY (CampaignID) REFERENCES Campaign(CampaignID)
);

CREATE TABLE Donor
(
    RegistrationDate DATE NOT NULL,
    EventID NUMERIC(5) NOT NULL,
    PersonID NUMERIC(9) NOT NULL,
    PRIMARY KEY (PersonID),
    FOREIGN KEY (PersonID) REFERENCES Person(PersonID)
);

CREATE TABLE Employee
(
    HourlyWage FLOAT NOT NULL,
    Seniority INT NOT NULL,
    WorkHours INT NOT NULL,
    Position VARCHAR(20) NOT NULL,
    EventID NUMERIC(5) NOT NULL,
    PersonID NUMERIC(9) NOT NULL,
    PRIMARY KEY (PersonID),
    FOREIGN KEY (PersonID) REFERENCES Person(PersonID)
);

CREATE TABLE Participates
(
    DonorID NUMERIC(9) NOT NULL,
    EventID NUMERIC(5) NOT NULL,
    PRIMARY KEY (DonorID, EventID),
    FOREIGN KEY (DonorID) REFERENCES Donor(PersonID),
    FOREIGN KEY (EventID) REFERENCES Event(EventID)
);

CREATE TABLE WorksOn
(
    EventID NUMERIC(5) NOT NULL,
    EmployeeID NUMERIC(9) NOT NULL,
    PRIMARY KEY (EventID, EmployeeID),
    FOREIGN KEY (EventID) REFERENCES Event(EventID),
    FOREIGN KEY (EmployeeID) REFERENCES Employee(PersonID)
);

CREATE TABLE Donation
(
    DonationID NUMERIC(5) NOT NULL,
    NumOfPayments INT NOT NULL,
    Amount FLOAT NOT NULL,
    DonationDate DATE NOT NULL,
    PaymentMethod VARCHAR(10) NOT NULL,
    CampaignID NUMERIC(5) NOT NULL,
    DonorID NUMERIC(9) NOT NULL,
    PRIMARY KEY (DonationID),
    FOREIGN KEY (DonorID) REFERENCES Donor(PersonID),
    FOREIGN KEY (CampaignID) REFERENCES Campaign(CampaignID)
);
```

עבור כל טבלה יצרנו פעולה desc כדי לראות את הטבלאות

```
SQL> desc Employee
Name          Type          Nullable Default Comments
-----
HOURLYWAGE    FLOAT
SENIORITY     INTEGER
WORKHOURS     INTEGER
POSITION      VARCHAR2(20)
EVENTID       NUMBER(5)
PERSONID      NUMBER(9)

SQL> desc Donor
Name          Type          Nullable Default Comments
-----
REGISTRATIONDATE DATE
EVENTID       NUMBER(5)
PERSONID      NUMBER(9)

SQL> desc Donation
Name          Type          Nullable Default Comments
-----
DONATIONID    NUMBER(5)
NUMOFPAYMENTS INTEGER
AMOUNT        FLOAT
DONATIONDATE  DATE
PAYMENTMETHOD VARCHAR2(20)
CAMPAIGNID    NUMBER(5)
DONORID       NUMBER(9)

SQL> desc Event
Name          Type          Nullable Default Comments
-----
EVENTID       NUMBER(5)
EVENTDATE     DATE
EVENTLOCATION  VARCHAR2(15)
CAMPAIGNID    NUMBER(5)
EMPLOYEEID    NUMBER(9)
DONORID_      NUMBER(9)

SQL> desc campaign
Name          Type          Nullable Default Comments
-----
CAMPAIGNID    NUMBER(5)
CAMPAIGNNAME  VARCHAR2(25)
STARTDATE     DATE
ENDDATE       DATE
DONATIONGOAL  INTEGER      Y

SQL> desc WorksOn
Name          Type          Nullable Default Comments
-----
EVENTID       NUMBER(5)
EMPLOYEEID    NUMBER(9)

SQL> desc Participates
Name          Type          Nullable Default Comments
-----
DONORID       NUMBER(9)
EVENTID       NUMBER(5)
```

ביצענו מחיקה של הטבלאות כמובן בסדר נכון מבחינת המפתחות

```
drop table WorksOn;  
drop table Participates;  
drop table Employee;  
drop table Event;  
drop table Donation;  
drop table Donor;  
drop table Campaign;  
drop table Person;
```

לאחר המחיקה המוצלחת יצרנו שוב את הטבלאות

```
Table created  
Table created  
Table created  
Table created  
Table created  
Table created  
Table created
```


אכלוס הטבלאות

לטובת בדיקת המערכת והדגמתה נצטרך ליצור נתונים שיאכלסו את הטבלאות.
לצורך כך נעזרנו ב- 4 כלים שונים ליצירת נתונים.

הכנסת נתונים דרך קובץ TXT:

- הכנסת נתונים לטבלת **Person**:

יצרנו קובץ txt בשם Person ואילו הכנסנו נתונים.
באמצעות Text Importer העלנו אותו לתוכנה והנתונים הוכנסו.

The screenshot shows the 'Text Importer - Person.txt' window. The 'Data from Textfile' tab is active. In the 'General' section, the 'Table' is set to 'PERSON'. The 'Fields' section shows a list of fields on the left and their corresponding database fields on the right. The 'Field6' is selected, showing 'PERSONID (NUMBER)' with a 'Fieldtype' of 'Number'. The 'SQL function' field is empty. The 'Result Preview' section at the bottom shows a table with 6 columns and 2 rows of data.

| 1 | 2 | 3 | 4 | 5 | 6 |
|-------|-------|-------------------------|-------------|----------------------|-----------|
| David | Cohen | david.cohen@example.com | 050-1234567 | 12 Herzl Tel Aviv | 211854325 |
| Sarah | Levy | sarah.levy@example.com | 050-2345678 | 34 Dizengof Tel Aviv | 233358964 |

At the bottom, the status bar indicates '10 records imported in 0.031 seconds'.

בדקנו שאכן הנתונים בתוך הטבלה באמצעות הפקודה:

select * from Person

וקבלנו את הטבלה עם הנתונים:

| | PERSONID | FIRSTNAME | ADDRESS | EMAIL | PHONENUMBER | LASTNAME |
|----|-----------|-----------|-------------------------|---------------------------|-------------|----------|
| 1 | 211854325 | David | 12 Herzl Tel Aviv | david.cohen@example.com | 050-1234567 | Cohen |
| 2 | 233358964 | Sarah | 34 Dizengof Tel Aviv | sarah.levy@example.com | 050-2345678 | Levy |
| 3 | 311245632 | Michael | 56 Ben Yehuda Tel Aviv | michael.katz@example.com | 050-3456789 | Katz |
| 4 | 155204698 | Rachel | 78 Allenby Tel Aviv | rachel.green@example.com | 050-4567890 | Green |
| 5 | 57056412 | Jonathan | 90 Rothschild Tel Aviv | jonathan.gold@example.com | 050-5678901 | Gold |
| 6 | 221854325 | David | 8 Herzl Jerusalem | david88@example.com | 050-1998767 | Shalom |
| 7 | 252158964 | Michal | 34 Rakefet Netanya | michal.levy@example.com | 050-2665678 | Levy |
| 8 | 322245632 | Noam | 16 Ben Yehuda Tel Aviv | noam56@example.com | 050-9776541 | Karni |
| 9 | 155999698 | Rachel | 8 Allenby Jerusalem | rachel99@example.com | 050-777890 | Harel |
| 10 | 99056412 | Jonathan | 90 Rabi Akiva Bnei-Braq | jonathan33@example.com | 050-5699901 | Harush |

הכנסת נתונים דרך קובץ EXCEL:

• הכנסת נתונים לטבלת Campaign:

יצרנו קובץ excel עם נתונים עבור טבלת Campaign.
באמצעות ODBC Importer העלנו את הקובץ לתוכנה והנתונים הוכנסו.

Data from ODBC Data to Oracle

General

Owner: Table: CAMPAIGN Clear Table

Commit every... 0 Overwrite duplicates Ignore duplicates

Initializing Script

Finalizing Script

Fields

CampaignID -> CAMPAIGNID
CampaignName -> CAMPAIGNNAME
DonationGoal -> DONATIONGOAL
StartDate -> STARTDATE
EndDate -> ENDDATE

Field: ENDDATE
Fieldtype: (Date)
Create SQL

SQL function: additional Oracle processing, for example: substr(#, 1, 20)

Result Preview

| CampaignID | CampaignName | DonationGoal | StartDate | EndDate |
|------------|--------------------|--------------|---------------------|---------------------|
| 1.0 | Forest Restoration | 80463.25 | 2023-12-28 00:00:00 | 2024-04-30 00:00:00 |

Import Import to Script Close SYSTEM@XE 401 records imported in 16.032 seconds Help

בדיקה שהנתונים הוכנסו:

```
select * from Campaign
```

| | CAMPAIGNID | CAMPAIGNNAME | STARTDATE | ENDDATE | DONATIONGOAL |
|----|------------|--------------------------|------------|------------|--------------|
| 1 | 1 | Forest Restoration | 28/12/2023 | 30/04/2024 | 80463 |
| 2 | 2 | Water Conservation | 22/07/2023 | 04/12/2023 | 103766 |
| 3 | 3 | Green Tourism | 19/08/2023 | 10/10/2023 | 97856 |
| 4 | 4 | Community Development | 01/09/2023 | 11/01/2024 | 122355 |
| 5 | 5 | Heritage Preservation | 03/11/2023 | 09/03/2024 | 111235 |
| 6 | 6 | Environmental Education | 14/09/2023 | 26/12/2023 | 121346 |
| 7 | 7 | Land Reclamation | 19/11/2023 | 17/01/2024 | 119836 |
| 8 | 8 | Afforestation | 05/10/2023 | 03/02/2024 | 134567 |
| 9 | 9 | Renewable Energy | 15/07/2023 | 09/01/2024 | 98456 |
| 10 | 10 | Agricultural Innovation | 12/09/2023 | 07/03/2024 | 105674 |
| 11 | 11 | Urban Forestry | 18/07/2023 | 22/11/2023 | 123457 |
| 12 | 12 | Wildlife Protection | 29/08/2023 | 30/11/2023 | 98765 |
| 13 | 14 | Research and Development | 15/08/2023 | 19/02/2024 | 112346 |
| 14 | 15 | Eco-Friendly Projects | 03/10/2023 | 20/03/2024 | 124568 |
| 15 | 16 | River Rehabilitation | 06/11/2023 | 10/02/2024 | 104568 |
| 16 | 17 | Forest Fire Prevention | 11/08/2023 | 14/12/2023 | 119875 |

• הכנסת נתונים לטבלת Donation:

Data from ODBC Data to Create

General

Owner: Table: Clear Table

Commit every... Overwrite duplicates ☐ Ignore duplicates ☒

Initializing Script

Finalizing Script

Fields

DonationID -> DONATIONID
PERSONID -> DONORID
CampaignID -> CAMPAIGNID
PaymentMethod -> PAYMENTMETHOD
Amount -> AMOUNT
NumOfPayments -> NUMOFPAYMENTS
DonationDate -> DONATIONDATE

Field: Fieldtype: Create SQL

SQL function

additional Oracle processing, for example: substr(#, 1, 20)

בדיקה שהנתונים הוכנסו:

```
select * from Donation;
```

| | DONATIONID | NUMOFPAYMENTS | AMOUNT | DONATIONDATE | PAYMENTMETHOD | CAMPAIGNID | DONORID |
|----|------------|---------------|--------|--------------|----------------|------------|-----------|
| 1 | 1 | 9 | 247.48 | 28/10/2023 | Credit Card | 5 | 211854325 |
| 2 | 3 | 10 | 39.18 | 22/07/2023 | Bank Transfer | 6 | 311245632 |
| 3 | 5 | 5 | 975.31 | 07/02/2024 | Credit Card | 2 | 57056412 |
| 4 | 7 | 10 | 392.92 | 19/02/2024 | Bank Transfer | 6 | 252158964 |
| 5 | 8 | 1 | 339.49 | 08/02/2024 | Online Payment | 2 | 322245632 |
| 6 | 11 | 5 | 681.5 | 29/11/2023 | Credit Card | 8 | 843267238 |
| 7 | 12 | 7 | 236.76 | 02/08/2023 | Check | 4 | 846699499 |
| 8 | 14 | 4 | 72.31 | 28/02/2024 | Cash | 2 | 823217557 |
| 9 | 15 | 5 | 458.25 | 07/04/2024 | Bank Transfer | 1 | 278483766 |
| 10 | 16 | 11 | 786.58 | 23/11/2023 | Bank Transfer | 9 | 444897653 |
| 11 | 17 | 10 | 418.89 | 20/12/2023 | Check | 7 | 936718518 |
| 12 | 23 | 11 | 261.63 | 19/11/2023 | Bank Transfer | 6 | 132478141 |
| 13 | 24 | 2 | 594.82 | 19/05/2024 | Bank Transfer | 8 | 885851983 |
| 14 | 26 | 5 | 749.29 | 20/09/2023 | Online Payment | 9 | 468381237 |
| 15 | 27 | 7 | 242.19 | 03/04/2024 | Online Payment | 1 | 496513286 |
| 16 | 28 | 3 | 792.5 | 12/09/2023 | Credit Card | 6 | 869793359 |
| 17 | 29 | 9 | 877.04 | 13/09/2023 | Check | 7 | 877145518 |
| 18 | 30 | 2 | 673.42 | 11/05/2024 | Check | 5 | 675926779 |
| 19 | 31 | 7 | 139.08 | 18/04/2024 | Online Payment | 4 | 483533519 |
| 20 | 34 | 4 | 609.64 | 22/03/2024 | Credit Card | 3 | 981395586 |
| 21 | 35 | 5 | 125.86 | 15/08/2023 | Bank Transfer | 1 | 124796735 |
| 22 | 36 | 11 | 352.68 | 27/04/2024 | Credit Card | 2 | 792224434 |

:Data Generator הכנסת נתונים דרך

• הכנסת נתונים לטבלת Person:

| PERSON | | | | |
|-------------|----------|--------|---------------------------------------|--------|
| Owner | | Table | Number of records | |
| SYSTEM | | PERSON | 400 | |
| Name | Type | Size | Data | Master |
| PERSONID | NUMBER | 9 | [111111111] | ▼ |
| FIRSTNAME | VARCHAR2 | 10 | FirstName | ▼ |
| ADDRESS | VARCHAR2 | 30 | Address1 + City | ▼ |
| EMAIL | VARCHAR2 | 25 | Email | ▼ |
| PHONENUMBER | VARCHAR2 | 15 | '05' + Random(0, 9) + '-' + [1111111] | ▼ |
| LASTNAME | VARCHAR2 | 10 | LastName | ▼ |
| * | | | | ▼ |

בדיקה שהנתונים הוכנסו:

```
select * from Person
```

| | PERSONID | FIRSTNAME | ADDRESS | EMAIL | PHONENUMBER | LASTNAME |
|----|-----------|-----------|--------------------------------|---------------------------|-------------|------------|
| 1 | 211854325 | David | 12 Herzl Tel Aviv | david.cohen@example.com | 050-1234567 | Cohen |
| 2 | 233358964 | Sarah | 34 Dizengof Tel Aviv | sarah.levy@example.com | 050-2345678 | Levy |
| 3 | 311245632 | Michael | 56 Ben Yehuda Tel Aviv | michael.katz@example.com | 050-3456789 | Katz |
| 4 | 155204698 | Rachel | 78 Allenby Tel Aviv | rachel.green@example.com | 050-4567890 | Green |
| 5 | 57056412 | Jonathan | 90 Rothschild Tel Aviv | jonathan.gold@example.com | 050-5678901 | Gold |
| 6 | 221854325 | David | 8 Herzl Jerusalem | david88@example.com | 050-1998767 | Shalom |
| 7 | 252158964 | Michal | 34 Rakefet Netanya | michal.levy@example.com | 050-2665678 | Levy |
| 8 | 322245632 | Noam | 16 Ben Yehuda Tel Aviv | noam56@example.com | 050-9776541 | Kami |
| 9 | 155999698 | Rachel | 8 Allenby Jerusalem | rachel99@example.com | 050-777890 | Harel |
| 10 | 99056412 | Jonathan | 90 Rabi Akiva Bnei-Braq | jonathan33@example.com | 050-5699901 | Harush |
| 11 | 843267238 | Martin | 34 Gloria RoadPompton Plains | martin.m@condianttechnolo | 056-1436691 | Marley |
| 12 | 846699499 | Jessica | 42nd StreetCampinas | jessica.coburn@qssgroup.b | 051-1298942 | Coburn |
| 13 | 494342266 | Ian | 33 Van DammeTulsa | ian@glmt.com | 052-6855173 | Brody |
| 14 | 823217557 | Meg | 991 Redford RoadSolikamsk | meg.rauhofe@infovision.c | 056-4949238 | Rauhofer |
| 15 | 278483766 | Sean | 99 Julianna DriveSmyrna | seand@cgi.com | 051-6247126 | Darren |
| 16 | 444897653 | Freddie | 71 Scaggs StreetRedwood Shores | freddie.statham@portageen | 053-4543742 | Statham |
| 17 | 936718518 | Ruth | 58 Ahmad RoadSuwon | r.romijnstamos@visionarys | 058-6419637 | Romijn-Sta |
| 18 | 778227355 | Vertical | 24 Matthau StreetBuffalo | vertical.rydell@creditors | 058-4374585 | Rydell |
| 19 | 331196396 | Tori | 53 Albright RoadDuluth | tori.koyana@dyncqinterma | 053-4348849 | Koyana |
| 20 | 459784952 | Victor | 91 Fehr RoadAustin | victor.burke@wci.com | 057-8686382 | Burke |
| 21 | 467211543 | Leonardo | 55 Raleigh RoadBelp | leonardo.chesnutt@anheuse | 056-1784722 | Chesnutt |
| 22 | 572851524 | Merrilee | 73 Hackman RoadThalwil | merrilee.woodward@caliber | 059-7946672 | Woodward |
| 23 | 132478141 | Clay | 371 Springfield AveSouthend on | clay.cotton@microtek.uk | 056-9239274 | Cotton |
| 24 | 885851983 | Denzel | 62 Lynne RoadBudapest | denzel.bullock@genghisgri | 058-5133781 | Bullock |
| 25 | 318142751 | Kasey | 9 Culkin StreetLancaster | k.foster@kimberlyclark.co | 056-6771883 | Foster |
| 26 | 468381237 | Machine | 54 Law StreetSaudarkrokr | machine.stiles@csi.is | 053-1423593 | Stiles |
| 27 | 496513286 | Olympia | 790 Jeffery StreetNorthbrook | olympia@als.com | 053-4897618 | Peniston |
| 28 | 869793359 | Daniel | 81 Aiken BlvdRavensburg | daniel.p@sfgo.de | 053-2341579 | Paquin |
| 29 | 877145518 | Ryan | 80 Kate DriveKobe | rkane@cowlitzbancorp.jp | 051-1494794 | Kane |
| 30 | 675926779 | Tony | 27 Swoosie RoadBoston | tony.tennison@nbs.com | 053-5649994 | Tennison |
| 31 | 483533519 | Liev | 12 Temuera RoadSanta Clarat | liev.penn@marathonheater. | 055-3897178 | Penn |
| 32 | 975498366 | Ricky | 20 Sara RoadHersum | ricky.carlton@qls.de | 057-9688387 | Carlton |
| 33 | 141999357 | Spencer | 72 Holly StreetEbersberg | spencer.root@kitba.de | 050-8614392 | Root |
| 34 | 981395586 | Aidan | 4 HaggardHorsham | aidan.murray@jphor.com | 057-3621425 | Murray |
| 35 | 124796735 | Maxine | 88 Gibbons StreetRueil-Malma | maxine.kapanka@calence.fr | 050-9613392 | Kapanka |
| 36 | 792224434 | Sander | 72 San Francisco StreetMaryvil | sander.taylor@kingland.co | 055-2499166 | Taylor |
| 37 | 211258358 | Murray | 42nd StreetLyon | murraym@sfb.fr | 051-8598188 | Marin |
| 38 | 779533258 | Roger | 85 Moriarty RoadTualatin | rbean@noodles.com | 051-1564254 | Bean |
| 39 | 961795379 | Willie | 36 Wilkinson DriveTualatin | w.foster@y2marketinga.com | 057-6473737 | Foster |

• הכנסת נתונים לטבלת Employee:

| EMPLOYEE | | | | | |
|------------|----------|----------|--|-------------------|---|
| Owner | | Table | | Number of records | |
| SYSTEM | | EMPLOYEE | | 400 | |
| Name | Type | Size | Data | Master | |
| HOURLYWAGE | FLOAT | 22 | Random(30, 100) | ... | ▼ |
| SENIORITY | NUMBER | | Random(1, 10) | ... | ▼ |
| WORKHOURS | NUMBER | | Random(5, 10) | ... | ▼ |
| POSITION | VARCHAR2 | 20 | List('Project Manager', 'Campaign Manager', 'Finance Manager', 'Volunteer', 'Volunteers Manager', 'Event Manager', 'Fund Raiser', 'Event Organizer', 'Tel... | ... | ▼ |
| EVENTID | NUMBER | 5 | [11111] | ... | ▼ |
| PERSONID | NUMBER | 9 | List(select PersonID from Person) | ... | ▼ |

בדיקה שהנתונים הוכנסו:

```
select * from Employee
```

| | HOURLYWAGE | SENIORITY | WORKHOURS | POSITION | EVENTID | PERSONID |
|----|------------|-----------|-----------|--------------------|---------|-----------|
| 1 | 62 | 5 | 6 | Event Organizer | 39298 | 186987147 |
| 2 | 54 | 5 | 5 | Telephonist | 29324 | 853763113 |
| 3 | 79 | 4 | 7 | Project Manager | 96255 | 359738524 |
| 4 | 68 | 8 | 7 | Project Manager | 68445 | 972543625 |
| 5 | 33 | 9 | 5 | Volunteer | 35598 | 899631822 |
| 6 | 61 | 9 | 10 | Project Manager | 47292 | 414542828 |
| 7 | 52 | 10 | 9 | Fund Raiser | 35692 | 946548967 |
| 8 | 56 | 6 | 8 | Event Organizer | 68962 | 135267658 |
| 9 | 38 | 3 | 8 | Project Manager | 74821 | 754317637 |
| 10 | 84 | 8 | 6 | Fund Raiser | 35869 | 535937329 |
| 11 | 95 | 1 | 10 | Secretary | 88673 | 278483766 |
| 12 | 40 | 6 | 7 | Volunteer | 71519 | 836952812 |
| 13 | 98 | 4 | 5 | Volunteers Manager | 46541 | 939755567 |
| 14 | 54 | 3 | 10 | Campaign Manager | 17373 | 218757672 |
| 15 | 90 | 1 | 9 | Event Organizer | 44377 | 793365692 |
| 16 | 97 | 4 | 7 | Secretary | 67114 | 491819425 |
| 17 | 94 | 10 | 7 | Project Manager | 66548 | 481424118 |
| 18 | 63 | 7 | 8 | Project Manager | 26944 | 611164944 |
| 19 | 31 | 8 | 8 | Fund Raiser | 27114 | 913789557 |
| 20 | 36 | 2 | 10 | Finance Manager | 21693 | 939775516 |
| 21 | 45 | 7 | 6 | Secretary | 28467 | 253778582 |

● הכנסת נתונים לטבלת Donor:

DONOR

Owner: SYSTEM Table: DONOR Number of records: 400

| Name | Type | Size | Data | Master |
|------------------|--------|------|-----------------------------------|--------|
| REGISTRATIONDATE | DATE | | Random(01/01/2010, 01/05/2024) | ... |
| EVENTID | NUMBER | 5 | [11111] | ... |
| PERSONID | NUMBER | 9 | List(select PersonID from Person) | ... |

Definition Options Result

SYSTEM@XE 400 records generated in 39.797 seconds

בדיקה שהנתונים הוכנסו:

```
select * from Donor
```

| | REGISTRATIONDATE | EVENTID | PERSONID |
|----|------------------|---------|-----------|
| 1 | 21/07/2010 | 88935 | 493544467 |
| 2 | 02/05/2017 | 42344 | 865638685 |
| 3 | 21/02/2016 | 41245 | 153515476 |
| 4 | 16/06/2022 | 49716 | 567346599 |
| 5 | 27/09/2021 | 77617 | 585424715 |
| 6 | 26/08/2019 | 92231 | 955984396 |
| 7 | 27/08/2022 | 56555 | 715723946 |
| 8 | 19/04/2011 | 43775 | 159952542 |
| 9 | 25/01/2019 | 28345 | 877145518 |
| 10 | 19/10/2018 | 52829 | 444897653 |
| 11 | 17/05/2014 | 14121 | 287355172 |
| 12 | 03/05/2021 | 17819 | 792815389 |
| 13 | 15/03/2013 | 96583 | 913789557 |
| 14 | 03/02/2016 | 32978 | 461382856 |
| 15 | 16/01/2012 | 67557 | 364759767 |
| 16 | 11/04/2012 | 92832 | 961795379 |
| 17 | 05/12/2015 | 89776 | 853315614 |
| 18 | 02/10/2010 | 73429 | 749856571 |
| 19 | 17/02/2015 | 93138 | 615959839 |
| 20 | 10/12/2018 | 96373 | 753488476 |
| 21 | 22/05/2018 | 16992 | 414542828 |
| 22 | 24/04/2023 | 28791 | 356613594 |
| 23 | 30/07/2021 | 76126 | 548163249 |
| 24 | 19/11/2020 | 58442 | 522834411 |
| 25 | 27/06/2019 | 69761 | 353299578 |
| 26 | 24/04/2023 | 63286 | 184921118 |
| 27 | 24/07/2013 | 65433 | 664641138 |
| 28 | 12/12/2019 | 56598 | 735621686 |
| 29 | 04/05/2011 | 85196 | 762385283 |
| 30 | 26/09/2023 | 68219 | 224381125 |
| 31 | 16/10/2010 | 15438 | 556427763 |
| 32 | 22/07/2021 | 48817 | 695937844 |
| 33 | 03/09/2016 | 58231 | 219432622 |
| 34 | 19/10/2017 | 91272 | 452738696 |
| 35 | 14/04/2021 | 24987 | 595749885 |
| 36 | 05/02/2021 | 35198 | 714378859 |
| 37 | 10/01/2011 | 79288 | 462369231 |
| 38 | 23/07/2010 | 64362 | 646215689 |
| 39 | 21/08/2015 | 85391 | 318485592 |

• הכנסת נתונים לטבלת Participates:

| PARTICIPATES | | | | | |
|--------------|--------|--------------|----------------------------------|-------------------|-----|
| Owner | | Table | | Number of records | |
| SYSTEM | | PARTICIPATES | | 400 | |
| Name | Type | Size | Data | Master | |
| DONORID | NUMBER | 9 | List(select PersonID from Donor) | ... | ... |
| EVENTID | NUMBER | 5 | List(select EventID from Event) | ... | ... |
| * | | | | ... | ... |

בדיקה שהנתונים הוכנסו:

```
select count(*) from Participates;
```

| COUNT(*) | |
|----------|-----|
| 1 | 400 |

• הכנסת נתונים לטבלת WorksOn:

| WORKSON | | | | | |
|------------|--------|---------|-------------------------------------|-------------------|-----|
| Owner | | Table | | Number of records | |
| SYSTEM | | WORKSON | | 400 | |
| Name | Type | Size | Data | Master | |
| EVENTID | NUMBER | 5 | List(select EventID from Event) | ... | ... |
| EMPLOYEEID | NUMBER | 9 | List(select PersonID from Employee) | ... | ... |
| * | | | | ... | ... |

בדיקה שהנתונים הוכנסו:

```
select * from WorksOn;
```

| | EVENTID | EMPLOYEEID |
|----|---------|------------|
| 1 | 11560 | 124796735 |
| 2 | 11560 | 556719822 |
| 3 | 11560 | 676761349 |
| 4 | 11578 | 443853155 |
| 5 | 11656 | 162137163 |
| 6 | 11656 | 899631822 |
| 7 | 11656 | 951419871 |
| 8 | 12176 | 385646575 |
| 9 | 12609 | 949629294 |
| 10 | 12816 | 119231529 |
| 11 | 12816 | 753488476 |
| 12 | 13118 | 548548833 |
| 13 | 13715 | 386665637 |
| 14 | 13715 | 789246959 |
| 15 | 15280 | 864417121 |
| 16 | 16045 | 172221481 |
| 17 | 16045 | 735621686 |
| 18 | 16045 | 935798395 |
| 19 | 16045 | 939775516 |
| 20 | 16356 | 722827558 |

הכנסת נתונים דרך אתר Mockaroo:

• הכנסת נתונים לטבלת Event:

מילאנו ערכים דרך האתר ולאחר מכן ייבאנו לתוכנה את קובץ ה-sql שנוצר והרצנו את פקודות ה-Insert

Event

| Field Name | Type | Options |
|---------------|-------------|---|
| EventID | Number | min: 11111 max: 99999 decimals: 0 blank: 0 % |
| EventDate | Datetime | 05/26/2020 to 05/26/2024 format: dd-mm-yyyy blank: 0 % |
| EventLocation | Custom List | Haifa, Ashdod, Netanya, Elad, Eilat, Bnei-Braq, Givataim, holon, Jerusalem, tal-Aviv, Beit-Shemesh, Givat random blank: 0 % |
| CampaignID | Number | min: 1 max: 400 decimals: 0 blank: 0 % |
| EmployeeID | Number | min: 111111111 max: 999999999 decimals: 0 blank: 0 % |
| DonorID | Number | min: 111111111 max: 999999999 decimals: 0 blank: 0 % |

+ ADD ANOTHER FIELD GENERATE FIELDS USING AI...

Rows: 400 Format: SQL Table Name: Event Include CREATE TABLE

Append Dataset: choose a dataset

GENERATE DATA PREVIEW SAVE CHANGES CREATE API MORE

```
insert into Event (EventID, EventDate, EventLocation, CampaignID, EmployeeID, DonorID_) values (31189, TO_DATE('01/02/2024', 'dd/mm/yyyy'), 'Netanya', 182, 416824151, 500969866);
insert into Event (EventID, EventDate, EventLocation, CampaignID, EmployeeID, DonorID_) values (23040, TO_DATE('28/12/2023', 'dd/mm/yyyy'), 'Bnei-Braq', 16, 544697141, 179784222);
insert into Event (EventID, EventDate, EventLocation, CampaignID, EmployeeID, DonorID_) values (35324, TO_DATE('12/01/2024', 'dd/mm/yyyy'), 'Holon', 169, 355769573, 839333701);
insert into Event (EventID, EventDate, EventLocation, CampaignID, EmployeeID, DonorID_) values (93426, TO_DATE('15/05/2022', 'dd/mm/yyyy'), 'Beer-Sheva', 320, 644754471, 702634238);
insert into Event (EventID, EventDate, EventLocation, CampaignID, EmployeeID, DonorID_) values (66781, TO_DATE('25/12/2020', 'dd/mm/yyyy'), 'Ofakim', 163, 247184684, 575562675);
insert into Event (EventID, EventDate, EventLocation, CampaignID, EmployeeID, DonorID_) values (55730, TO_DATE('11/01/2022', 'dd/mm/yyyy'), 'Eilat', 148, 932000558, 194836573);
insert into Event (EventID, EventDate, EventLocation, CampaignID, EmployeeID, DonorID_) values (60659, TO_DATE('23/10/2021', 'dd/mm/yyyy'), 'Netanya', 58, 679018338, 825996992);
insert into Event (EventID, EventDate, EventLocation, CampaignID, EmployeeID, DonorID_) values (98791, TO_DATE('10/03/2021', 'dd/mm/yyyy'), 'Netanya', 341, 372295580, 209893434);
insert into Event (EventID, EventDate, EventLocation, CampaignID, EmployeeID, DonorID_) values (79821, TO_DATE('05/11/2021', 'dd/mm/yyyy'), 'Eilat', 386, 979995412, 758652168);
insert into Event (EventID, EventDate, EventLocation, CampaignID, EmployeeID, DonorID_) values (90059, TO_DATE('29/06/2022', 'dd/mm/yyyy'), 'Beer-Sheva', 220, 776818770, 985965938);
insert into Event (EventID, EventDate, EventLocation, CampaignID, EmployeeID, DonorID_) values (61324, TO_DATE('11/08/2022', 'dd/mm/yyyy'), 'Givat-Shmuel', 175, 412763771, 78790963);
insert into Event (EventID, EventDate, EventLocation, CampaignID, EmployeeID, DonorID_) values (93212, TO_DATE('08/05/2022', 'dd/mm/yyyy'), 'Netanya', 94, 450047663, 765319732);
insert into Event (EventID, EventDate, EventLocation, CampaignID, EmployeeID, DonorID_) values (44026, TO_DATE('19/06/2022', 'dd/mm/yyyy'), 'Beit-Shemesh', 36, 166184517, 294839797);
insert into Event (EventID, EventDate, EventLocation, CampaignID, EmployeeID, DonorID_) values (32707, TO_DATE('13/06/2022', 'dd/mm/yyyy'), 'Eilat', 289, 418801363, 761794783);
insert into Event (EventID, EventDate, EventLocation, CampaignID, EmployeeID, DonorID_) values (19827, TO_DATE('05/05/2021', 'dd/mm/yyyy'), 'Ashdod', 273, 235446752, 833975541);
insert into Event (EventID, EventDate, EventLocation, CampaignID, EmployeeID, DonorID_) values (48022, TO_DATE('21/12/2023', 'dd/mm/yyyy'), 'Givataim', 174, 782817562, 715361909);
insert into Event (EventID, EventDate, EventLocation, CampaignID, EmployeeID, DonorID_) values (65087, TO_DATE('17/10/2023', 'dd/mm/yyyy'), 'Holon', 17, 985518267, 740924516);
```

```
select * from Event
```

בדקנו שהנתונים אכן הוכנסו:

| | EVENTID | EVENTDATE | EVENTLOCATION | CAMPAIGNID | EMPLOYEEID | DONORID_ |
|----|---------|------------|---------------|------------|------------|-----------|
| 1 | 89751 | 04/12/2021 | Elad | 180 | 967045685 | 250191439 |
| 2 | 43300 | 03/10/2023 | Haifa | 156 | 402266922 | 658085317 |
| 3 | 59452 | 10/08/2020 | Tel-Aviv | 326 | 156996771 | 305044532 |
| 4 | 65574 | 22/01/2024 | Ofakim | 16 | 163122111 | 310957227 |
| 5 | 17332 | 01/10/2020 | Elad | 21 | 280907001 | 255003607 |
| 6 | 52229 | 03/11/2023 | Beit-Shemesh | 77 | 722387215 | 774506577 |
| 7 | 24497 | 17/03/2022 | Jerusalem | 81 | 331270487 | 265784215 |
| 8 | 95518 | 30/05/2020 | Ofakim | 169 | 696264887 | 744066353 |
| 9 | 77821 | 16/08/2020 | Tel-Aviv | 276 | 959427946 | 424829539 |
| 10 | 28270 | 05/03/2021 | Tel-Aviv | 200 | 772239243 | 692663580 |
| 11 | 72159 | 14/04/2024 | Netanya | 149 | 404601573 | 762703551 |
| 12 | 16045 | 09/02/2023 | Bnei-Braq | 199 | 476950972 | 520994712 |
| 13 | 51087 | 18/08/2021 | Tel-Aviv | 125 | 194030777 | 294021950 |
| 14 | 43666 | 26/08/2020 | Elad | 230 | 179519832 | 598388399 |
| 15 | 99575 | 11/03/2024 | Beer-Sheva | 259 | 615210757 | 930296660 |
| 16 | 47016 | 08/12/2022 | Netanya | 168 | 142632294 | 396548079 |
| 17 | 72419 | 29/06/2021 | Netanya | 336 | 492265472 | 144982030 |
| 18 | 41390 | 15/01/2024 | Eilat | 371 | 918113238 | 596513164 |
| 19 | 17861 | 23/05/2024 | Jerusalem | 215 | 174594959 | 183648265 |
| 20 | 25530 | 15/08/2021 | Haifa | 247 | 580121126 | 754255708 |

גיבוי הנתונים

בחרנו את הטבלאות אותם נרצה לגבות וביצענו export לקובץ sql בשם: backup26.05

| Name | Type | Compiled |
|--------------------------|-------|---------------------|
| AQS_INTERNET_AGENT_PRIVS | TABLE | 27/08/2011 08:22:45 |
| AQS_INTERNET_AGENTS | TABLE | 27/08/2011 08:22:45 |
| AQS_QUEUES | TABLE | 27/08/2011 08:22:44 |
| AQS_QUEUE_TABLES | TABLE | 27/08/2011 08:22:44 |
| AQS_SCHEDULES | TABLE | 27/08/2011 08:22:44 |
| CAMPAIGN | TABLE | 26/05/2024 01:54:31 |
| DEFS_AQCALL | TABLE | 27/08/2011 08:33:09 |
| DEFS_AQERROR | TABLE | 27/08/2011 08:32:59 |
| DEFS_CALLDEST | TABLE | 27/08/2011 08:33:09 |
| DEFS_DEFAULTDEST | TABLE | 27/08/2011 08:23:03 |
| DEFS_DESTINATION | TABLE | 27/08/2011 08:33:09 |
| DEFS_ERROR | TABLE | 27/08/2011 08:33:09 |
| DEFS_LOB | TABLE | 27/08/2011 08:23:04 |
| DEFS_ORIGIN | TABLE | 27/08/2011 08:23:04 |
| DEFS_PROPAGATOR | TABLE | 27/08/2011 08:32:57 |
| DEFS_PUSHED_TRANSACTIONS | TABLE | 27/08/2011 08:23:04 |
| DONATION | TABLE | 26/05/2024 02:10:52 |
| DONOR | TABLE | 26/05/2024 00:56:00 |
| EMPLOYEE | TABLE | 26/05/2024 00:56:00 |
| EVENT | TABLE | 26/05/2024 11:17:00 |
| HELP | TABLE | 27/08/2011 08:36:18 |
| LOGMNR_AGE_SPILLS | TABLE | 27/08/2011 08:24:18 |
| LOGMNR_ATTRCOLS | TABLE | 27/08/2011 08:24:18 |
| LOGMNR_ATTRIBUTES | TABLE | 27/08/2011 08:24:18 |
| LOGMNR_CCOLS | TABLE | 27/08/2011 08:24:18 |
| LOGMNR_DBNAME_UID_MAP | TABLE | 27/08/2011 08:24:17 |
| LOGMNR_CDEFS | TABLE | 27/08/2011 08:24:18 |
| LOGMNR_GSBA | TABLE | 27/08/2011 08:24:18 |
| LOGMNR_GSII | TABLE | 27/08/2011 08:24:18 |
| LOGMNR_GTCS | TABLE | 27/08/2011 08:24:18 |
| LOGMNR_GTLO | TABLE | 27/08/2011 08:24:18 |
| LOGMNR_COLS | TABLE | 27/08/2011 08:24:18 |
| LOGMNR_COLTYPES | TABLE | 27/08/2011 08:24:18 |
| LOGMNR_DICTIONARY\$ | TABLE | 27/08/2011 08:24:18 |
| LOGMNR_DICTSTATES | TABLE | 27/08/2011 08:24:18 |
| LOGMNR_ENCS | TABLE | 27/08/2011 08:24:19 |
| LOGMNR_ERRORS | TABLE | 27/08/2011 08:24:18 |

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 D:\Hodaya\Desktop\פרוייקט\גיוני נתונים\מסמך דשנה\מסמך דשנה\backup26.05

▼ SYSTEM@XE

Exporting... Done

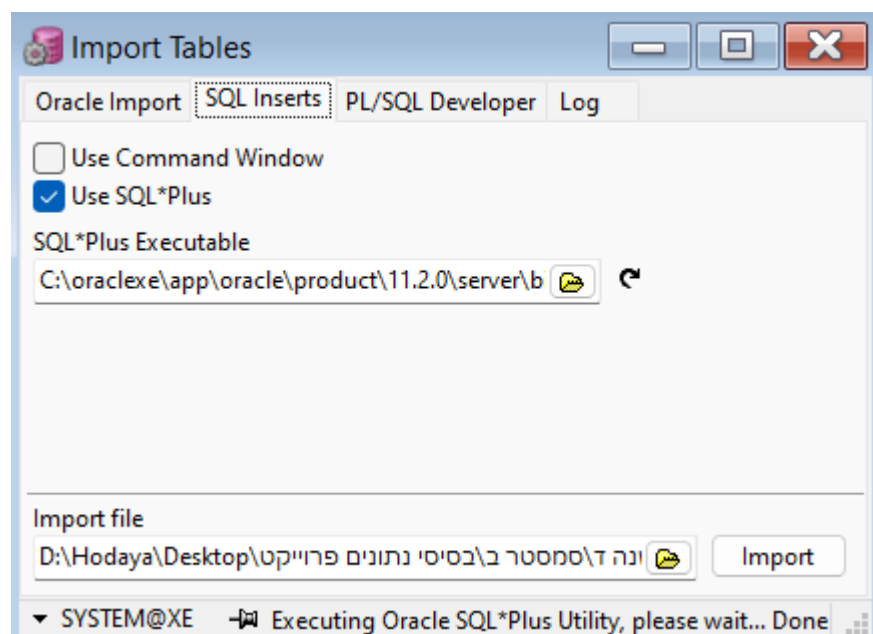
כעת כדי לראות שהגיבוי אכן עבד כמו שצריך, נבצע מחיקה של הטבלאות ואז נשחזר אותן מהגיבוי.

```
drop table WorksOn;  
drop table Participates;  
drop table Employee;  
drop table Event;  
drop table Donation;  
drop table Donor;  
drop table Campaign;  
drop table Person;
```

ביצענו מחיקה.

כעת נבצע שחזור:

עשינו Import Tables לקובץ backup26.05.sql



נבדוק שהשחזור עבד:

```
select * from Event;
select * from Campaign;
select * from Person;
select * from Employee;
select * from Donor;
select * from Donation;
select * from WorksOn;
select * from Participates;
```

| Select event | Select campaign | Select person | Select employee | Select donor | Select donation | Select workson | Select p |
|--------------|-----------------|---------------|-----------------|--------------|-----------------|----------------|----------|
| | | | | | | | |
| | | | | | | | |
| EVENTID | EVENTDATE | EVENTLOCATION | CAMPAIGNID | EMPLOYEEID | DONORID | | |
| 1 | 89751 | 04/12/2021 | Elad | 180 | 967045685 | 250191439 | |
| 2 | 43300 | 03/10/2023 | Haifa | 156 | 402266922 | 658085317 | |
| 3 | 59452 | 10/08/2020 | Tel-Aviv | 326 | 156996771 | 305044532 | |
| 4 | 65574 | 22/01/2024 | Ofakim | 16 | 163122111 | 310957227 | |
| 5 | 17332 | 01/10/2020 | Elad | 21 | 280907001 | 255003607 | |
| 6 | 52229 | 03/11/2023 | Beit-Shemesh | 77 | 722387215 | 774506577 | |
| 7 | 24497 | 17/03/2022 | Jerusalem | 81 | 331270487 | 265784215 | |
| 8 | 95518 | 30/05/2020 | Ofakim | 169 | 696264887 | 744066353 | |
| 9 | 77821 | 16/08/2020 | Tel-Aviv | 276 | 959427946 | 424829539 | |
| 10 | 28270 | 05/03/2021 | Tel-Aviv | 200 | 772239243 | 692663580 | |
| 11 | 72159 | 14/04/2024 | Netanya | 149 | 404601573 | 762703551 | |
| 12 | 16045 | 09/02/2023 | Bnei-Braq | 199 | 476950972 | 520994712 | |
| 13 | 51087 | 18/08/2021 | Tel-Aviv | 125 | 194030777 | 294021950 | |
| 14 | 43666 | 26/08/2020 | Elad | 230 | 179519832 | 598388399 | |
| 15 | 99575 | 11/03/2024 | Beer-Sheva | 259 | 615210757 | 930296660 | |
| 16 | 47016 | 08/12/2022 | Netanya | 168 | 142632294 | 396548079 | |
| 17 | 72419 | 29/06/2021 | Netanya | 336 | 492265472 | 144982030 | |
| 18 | 41390 | 15/01/2024 | Eilat | 371 | 918113238 | 596513164 | |
| 19 | 17861 | 23/05/2024 | Jerusalem | 215 | 174594959 | 183648265 | |
| 20 | 25530 | 15/08/2021 | Haifa | 247 | 580121126 | 754255708 | |
| 21 | 33385 | 06/03/2022 | Bnei-Braq | 75 | 754680918 | 750741524 | |
| 22 | 95869 | 16/02/2024 | Haifa | 224 | 335085790 | 737985884 | |
| 23 | 81977 | 19/04/2022 | Modiin | 330 | 660331401 | 637351104 | |
| 24 | 38870 | 07/07/2020 | Ofakim | 275 | 986861504 | 942333691 | |
| 25 | 91687 | 26/03/2024 | Ofakim | 182 | 931240734 | 636429282 | |
| 26 | 68266 | 06/05/2023 | Jerusalem | 174 | 588130165 | 801290517 | |
| 27 | 57451 | 17/01/2023 | Modiin | 172 | 599714565 | 660522197 | |
| 28 | 41292 | 14/05/2024 | Modiin | 183 | 296701420 | 288746533 | |
| 29 | 18570 | 12/08/2020 | Modiin | 218 | 450316996 | 680426414 | |
| 30 | 16845 | 13/08/2023 | Beer-Sheva | 76 | 837128025 | 929606599 | |
| 31 | 72865 | 05/05/2021 | Jerusalem | 208 | 267732710 | 878520462 | |

אכן קבלנו את כל הנתונים של הטבלאות ומכאן ניתן לראות שהגיבוי והשחזור עבדו כמו שצריך.