

מיני פרויקט בסיסי נתונים

מגישות:

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מעין אלקיים: 212612972

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שם הארגון: איחוד הצלה.

תיאור הארגון:

איחוד הצלה הוא ארגון מתנדבים ישראלי שנוסד בשנת 2006 על מנת לאחד את מתנדבי "הצלה" ברחבי הארץ. הארגון מספק מענה רפואי ראשוני ומקצועי עד להגעת אמבולנס, ובימינו מונה מעל 6,500 מתנדבים פעילים מדין ועד אילת, פועל 24/7, גם בשבתות וחגים. המתנדבים מגישים סיוע רפואי חיוני ומגיעים מכל שכבות האוכלוסייה בישראל. ייעודו של הארגון הוא לטפל במקרים רפואיים ללא הבדל דת, גזע ומין, בתיאום עם גורמים פועלים להצלת חיים, ולהעניק טיפול רפואי ראשוני בתוך 90 שניות, על מנת להציל חיים ולמזער נזקים. מטרות הארגון כוללות הגשת סיוע רפואי בהתנדבות לכל נזקק בתוך 90 שניות, אפשרות למתנדבים לפעול לפי אורח חייהם, דתם ואמונתם, פיתוח יישומים וטכנולוגיות מתקדמות להצלת חיים, פעולה במקצועיות בכל תחומי העשייה, וציוד מקצועי ומתקדם למתנדבים. הפרויקט שלנו מתמקד בתחום הקורסים.

* * *

ישויות:

1. משתתפים: Participants

- ת.ז של משתתף (מזהה) p_id
- role - תפקיד של משתתף.
- p_name - שם משתתף.
- gender - גבר/ אישה.
- p_date - תאריך לידה של משתתף

2. קבוצה: StudentGroup

- ת.ז של קבוצה (מזהה) g_id
- g_hour - שעה בלוח זמנים שבה מתקיים הקורס של אותה קבוצה
- g_day - יום בלוח זמנים שבה מתקיים הקורס של אותה קבוצה
- Max_p - מספר מקסימלי של משתתפים.

3. חדר: Room

- ת.ז של חדר (מזהה) r_id
- location - מיקום החדר שבו מתקיים הקורס.
- numplace - מס מקומות ישיבה בחדר.
- type - מעבדה / אולם / שטח.

4. ציוד רפואי: Equipment

- ת.ז של ציוד רפואי (מזהה) e_id
- e_id - ת.ז של ציוד
- e_date - תאריך תפוגה של ציוד.
- amount - הכמות הכוללת של פריט הציוד הזמין במלאי.

5. קורסים : Courses

- ת.ז של קורס (מזהה) c_id
- C_name - שם קורס.
- categories - קטגוריה של קורס (חובשים/ מגיש עזרה ראשונה/ החייאה).
- pre-course - דרישות קדם לקורס הנוכחי.
- presence - נוכחות חובה בקורס (T/F).

6. מרצים : lecturers

- ת.ז של מרצה (מזהה) l_id
- l_name - שם של מרצה.
- l_date - תאריך לידה.
- seniority - ותק של מרצה.
- training - הכשרה של מרצה.

קשרים:

1. $\text{StudentGroup} \text{ Room (M)} \Leftrightarrow (1)$
Relation Name: Scheduled In

2. $\text{StudentGroup (M)} \Leftrightarrow (M) \text{ Participants}$
Relation Name: belongs

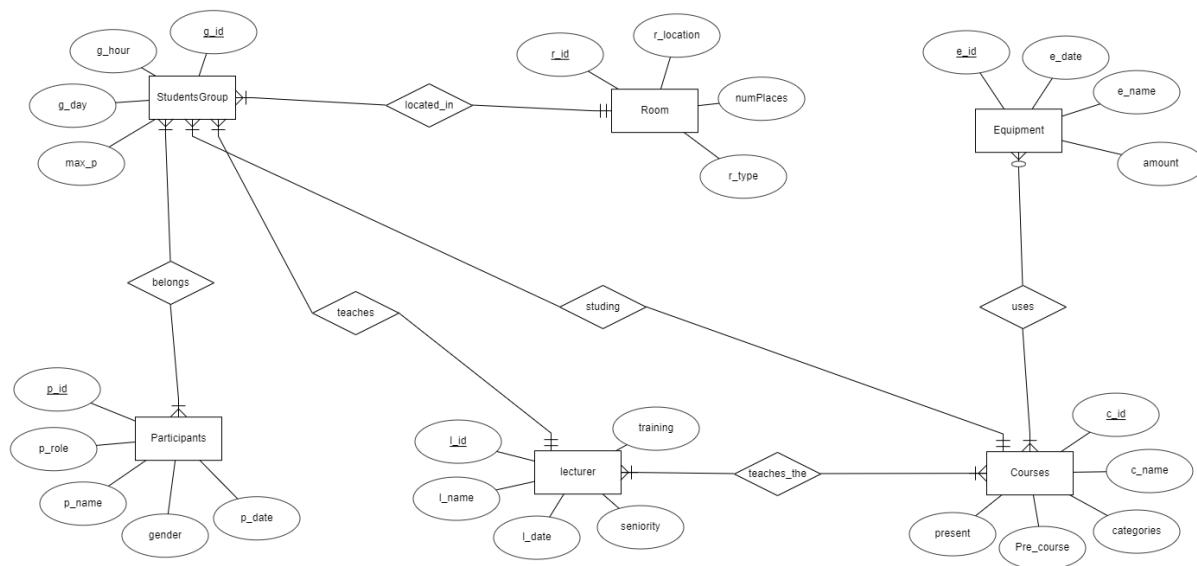
3. $\text{StudentGroup (1)} \Leftrightarrow (M) \text{ lecturers}$
Relation Name: teaches

4. $\text{StudentGroup (1)} \Leftrightarrow (M) \text{ lecturers}$
Relation Name: teaches

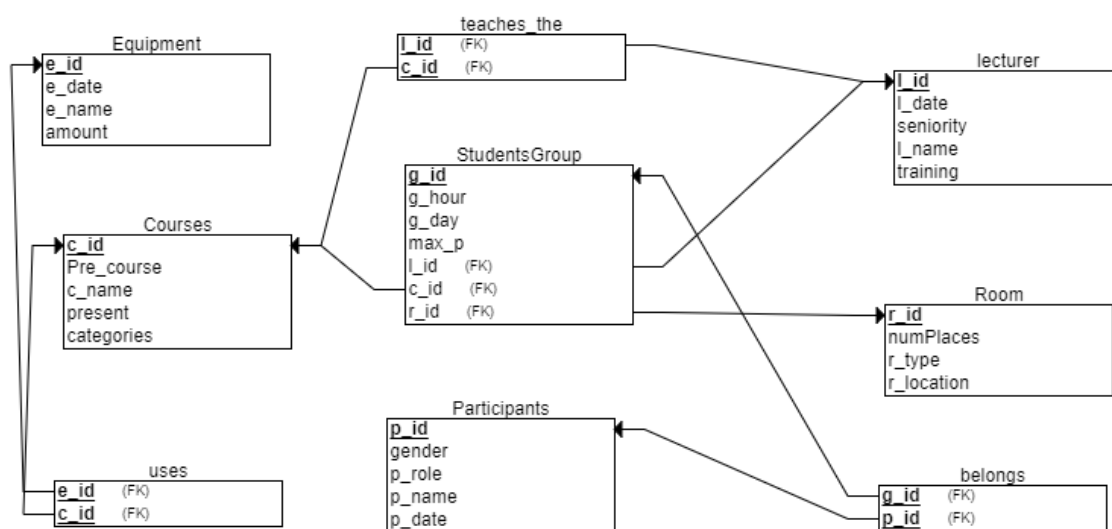
5. $\text{lecturers (M)} \Leftrightarrow (M) \text{ Courses}$
Relation Name: teaches_the

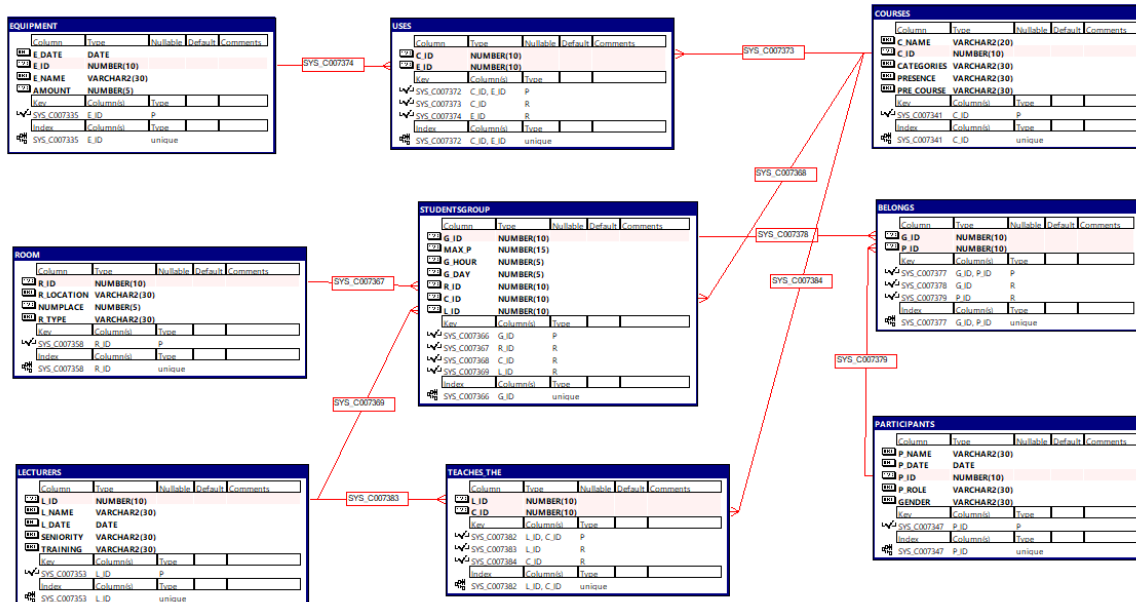
6. $\text{Courses (M)} \Leftrightarrow (M) \text{ Equipment}$
Relation Name: teaches

תרשים ERD:



תרשים DSD:





יצירת הטבלאות:

CREATE TABLE Equipment

```
(
  e_date DATE NOT NULL,
  e_id NUMBER(10) NOT NULL,
  e_name VARCHAR2(30) NOT NULL,
  amount NUMBER(5) NOT NULL,
  PRIMARY KEY (e_id)
);
```

CREATE TABLE Courses

```
(
  C_name VARCHAR2(20) NOT NULL,
  c_id NUMBER(10) NOT NULL,
  categories VARCHAR2(30) NOT NULL,
  presence VARCHAR2(30) NOT NULL,
  pre_course VARCHAR2(30) NOT NULL,
  PRIMARY KEY (c_id)
);
```

CREATE TABLE Participants

```
(
  p_name VARCHAR2(30) NOT NULL,
  p_date DATE NOT NULL,
  p_id NUMBER(10) NOT NULL,
  p_role VARCHAR2(30) NOT NULL,
  gender VARCHAR2(30) NOT NULL,
  PRIMARY KEY (p_id)
);
```

CREATE TABLE lecturers

```
(
  l_id NUMBER(10) NOT NULL,
  l_name VARCHAR2(30) NOT NULL,
```

```

l_date DATE NOT NULL,
seniority VARCHAR2(30) NOT NULL,
training VARCHAR2(30) NOT NULL,
PRIMARY KEY (l_id)
);

CREATE TABLE Room
(
  r_id NUMBER(10) NOT NULL,
  r_location VARCHAR2(30) NOT NULL,
  numplace NUMBER(5) NOT NULL,
  r_type VARCHAR2(30) NOT NULL,
  PRIMARY KEY (r_id)
);

CREATE TABLE StudentsGroup
(
  g_id NUMBER(10) NOT NULL,
  Max_p NUMBER(15) NOT NULL,
  g_hour NUMBER(5) NOT NULL,
  g_day NUMBER(5) NOT NULL,
  r_id NUMBER(10) NOT NULL,
  c_id NUMBER(10) NOT NULL,
  l_id NUMBER(10) NOT NULL,
  PRIMARY KEY (g_id),
  FOREIGN KEY (r_id) REFERENCES Room(r_id),
  FOREIGN KEY (c_id) REFERENCES Courses(c_id),
  FOREIGN KEY (l_id) REFERENCES lecturers(l_id)
);

CREATE TABLE uses
(
  c_id NUMBER(10) NOT NULL,
  e_id NUMBER(10) NOT NULL,
  PRIMARY KEY (c_id, e_id),
  FOREIGN KEY (c_id) REFERENCES Courses(c_id),
  FOREIGN KEY (e_id) REFERENCES Equipment(e_id)
);

CREATE TABLE belongs
(
  g_id NUMBER(10) NOT NULL,
  p_id NUMBER(10) NOT NULL,
  PRIMARY KEY (g_id, p_id),
  FOREIGN KEY (g_id) REFERENCES StudentsGroup(g_id),
  FOREIGN KEY (p_id) REFERENCES Participants(p_id)
);

CREATE TABLE teaches_the
(
  l_id NUMBER(10) NOT NULL,
  c_id NUMBER(10) NOT NULL,
  PRIMARY KEY (l_id, c_id),
  FOREIGN KEY (l_id) REFERENCES lecturers(l_id),
  FOREIGN KEY (c_id) REFERENCES Courses(c_id)
);

```

מחיקת הטבלאות:

```
drop table uses;
drop table teaches_the;
drop table belongs;
drop table StudentsGroup;
drop table Room;
drop table lecturers;
drop table Participants;
drop table Courses;
drop table Equipment;
```

הכנסת נתונים לטבלה:
● פקודות insert:

```
--
INSERT INTO Equipment (e_date, e_id, e_name, amount) VALUES (TO_DATE('2023-01-15', 'YYYY-MM-DD'), 1,
'First Aid Kit', 50);
INSERT INTO Equipment (e_date, e_id, e_name, amount) VALUES (TO_DATE('2023-02-20', 'YYYY-MM-DD'), 2,
'Stethoscope', 30);
INSERT INTO Equipment (e_date, e_id, e_name, amount) VALUES (TO_DATE('2023-03-10', 'YYYY-MM-DD'), 3,
'Blood Pressure Monitor', 70);
INSERT INTO Equipment (e_date, e_id, e_name, amount) VALUES (TO_DATE('2023-04-05', 'YYYY-MM-DD'), 4,
'Thermometer', 20);
INSERT INTO Equipment (e_date, e_id, e_name, amount) VALUES (TO_DATE('2023-05-15', 'YYYY-MM-DD'), 5,
'Glucose Meter', 40);
INSERT INTO Equipment (e_date, e_id, e_name, amount) VALUES (TO_DATE('2023-06-25', 'YYYY-MM-DD'), 6,
'Oxygen Tank', 25);
INSERT INTO Equipment (e_date, e_id, e_name, amount) VALUES (TO_DATE('2023-07-30', 'YYYY-MM-DD'), 7,
'Defibrillator', 60);
INSERT INTO Equipment (e_date, e_id, e_name, amount) VALUES (TO_DATE('2023-08-15', 'YYYY-MM-DD'), 8,
'Surgical Gloves', 350);
INSERT INTO Equipment (e_date, e_id, e_name, amount) VALUES (TO_DATE('2023-09-10', 'YYYY-MM-DD'), 9,
'Face Mask', 500);
INSERT INTO Equipment (e_date, e_id, e_name, amount) VALUES (TO_DATE('2023-10-05', 'YYYY-MM-DD'), 10,
'CPR Manikin', 15);
--Courses
INSERT INTO Courses (C_name, c_id, categories, presence, pre_course) VALUES ('Basic First Aid', 1, 'Medical',
'Required', 'None');
INSERT INTO Courses (C_name, c_id, categories, presence, pre_course) VALUES ('CPR', 2, 'Medical', 'Required',
'Basic First Aid');
INSERT INTO Courses (C_name, c_id, categories, presence, pre_course) VALUES ('Advanced Life Support', 3,
'Medical', 'Required', 'CPR');
INSERT INTO Courses (C_name, c_id, categories, presence, pre_course) VALUES ('Trauma Care', 4, 'Medical',
'Required', 'Basic First Aid');
INSERT INTO Courses (C_name, c_id, categories, presence, pre_course) VALUES ('Pediatric Care', 5, 'Medical',
'Required', 'Basic First Aid');
INSERT INTO Courses (C_name, c_id, categories, presence, pre_course) VALUES ('Emergency Response', 6,
'Medical', 'Required', 'None');
INSERT INTO Courses (C_name, c_id, categories, presence, pre_course) VALUES ('Disaster Management', 7,
'Management', 'Optional', 'Emergency Response');
INSERT INTO Courses (C_name, c_id, categories, presence, pre_course) VALUES ('Health and Safety', 8, 'Safety',
'Required', 'None');
INSERT INTO Courses (C_name, c_id, categories, presence, pre_course) VALUES ('Wilderness First Aid', 9,
'Medical', 'Optional', 'Basic First Aid');
INSERT INTO Courses (C_name, c_id, categories, presence, pre_course) VALUES ('Infection Control', 10, 'Medical',
'Required', 'Health and Safety');
--Participants
```



```

INSERT INTO Participants (p_name, p_date, p_id, p_role, gender) VALUES ('John Doe', TO_DATE('1990-01-01',
'YYYY-MM-DD'), 101, 'Paramedic', 'Male');
INSERT INTO Participants (p_name, p_date, p_id, p_role, gender) VALUES ('Jane Smith', TO_DATE('1992-02-15',
'YYYY-MM-DD'), 102, 'EMT', 'Female');
INSERT INTO Participants (p_name, p_date, p_id, p_role, gender) VALUES ('Alice Johnson', TO_DATE('1995-03-
20', 'YYYY-MM-DD'), 103, 'First Responder', 'Female');
INSERT INTO Participants (p_name, p_date, p_id, p_role, gender) VALUES ('Bob Brown', TO_DATE('1993-04-25',
'YYYY-MM-DD'), 104, 'Certified Nurse', 'Male');
INSERT INTO Participants (p_name, p_date, p_id, p_role, gender) VALUES ('Charlie Davis', TO_DATE('1988-05-30',
'YYYY-MM-DD'), 105, 'Paramedic', 'Non-binary');
INSERT INTO Participants (p_name, p_date, p_id, p_role, gender) VALUES ('Diana Evans', TO_DATE('1991-06-05',
'YYYY-MM-DD'), 106, 'First Responder', 'Female');
INSERT INTO Participants (p_name, p_date, p_id, p_role, gender) VALUES ('Edward Franklin', TO_DATE('1994-07-
10', 'YYYY-MM-DD'), 107, 'EMT', 'Male');
INSERT INTO Participants (p_name, p_date, p_id, p_role, gender) VALUES ('Fiona Green', TO_DATE('1989-08-15',
'YYYY-MM-DD'), 108, 'Certified Nurse', 'Female');
INSERT INTO Participants (p_name, p_date, p_id, p_role, gender) VALUES ('George Harris', TO_DATE('1996-09-
20', 'YYYY-MM-DD'), 109, 'Paramedic', 'Male');
INSERT INTO Participants (p_name, p_date, p_id, p_role, gender) VALUES ('Helen Irvine', TO_DATE('1997-10-25',
'YYYY-MM-DD'), 110, 'First Responder', 'Female');

--lecturers
INSERT INTO lecturers (l_id, l_name, l_date, seniority, training) VALUES (111, 'Dr. Emily White', TO_DATE('2022-
01-15', 'YYYY-MM-DD'), 'Senior', 'Medical');
INSERT INTO lecturers (l_id, l_name, l_date, seniority, training) VALUES (112, 'Prof. John Miller', TO_DATE('2021-
02-20', 'YYYY-MM-DD'), 'Expert', 'Trauma Care');
INSERT INTO lecturers (l_id, l_name, l_date, seniority, training) VALUES (113, 'Dr. Sarah Thompson',
TO_DATE('2020-03-10', 'YYYY-MM-DD'), 'Intermediate', 'CPR');
INSERT INTO lecturers (l_id, l_name, l_date, seniority, training) VALUES (114, 'Mr. Michael Brown',
TO_DATE('2019-04-05', 'YYYY-MM-DD'), 'Junior', 'First Aid');
INSERT INTO lecturers (l_id, l_name, l_date, seniority, training) VALUES (115, 'Mrs. Anna Wilson', TO_DATE('2018-
05-15', 'YYYY-MM-DD'), 'Senior', 'Emergency Response');
INSERT INTO lecturers (l_id, l_name, l_date, seniority, training) VALUES (116, 'Ms. Laura Davis', TO_DATE('2017-
06-25', 'YYYY-MM-DD'), 'Expert', 'Disaster Management');
INSERT INTO lecturers (l_id, l_name, l_date, seniority, training) VALUES (117, 'Dr. Kevin Clark', TO_DATE('2016-
07-30', 'YYYY-MM-DD'), 'Intermediate', 'Pediatric Care');
INSERT INTO lecturers (l_id, l_name, l_date, seniority, training) VALUES (118, 'Prof. Jessica Lewis',
TO_DATE('2015-08-15', 'YYYY-MM-DD'), 'Senior', 'Advanced Life Support');
INSERT INTO lecturers (l_id, l_name, l_date, seniority, training) VALUES (119, 'Mr. Brian Walker', TO_DATE('2014-
09-10', 'YYYY-MM-DD'), 'Junior', 'Health and Safety');
INSERT INTO lecturers (l_id, l_name, l_date, seniority, training) VALUES (120, 'Mrs. Nancy Scott', TO_DATE('2013-
10-05', 'YYYY-MM-DD'), 'Intermediate', 'Infection Control');

--Room
INSERT INTO Room (r_id, r_location, numplace, r_type) VALUES (1, 'Building A, Floor 1', 50, 'Classroom');
INSERT INTO Room (r_id, r_location, numplace, r_type) VALUES (2, 'Building B, Floor 2', 40, 'Lecture Hall');
INSERT INTO Room (r_id, r_location, numplace, r_type) VALUES (3, 'Building C, Floor 3', 30, 'Training Room');
INSERT INTO Room (r_id, r_location, numplace, r_type) VALUES (4, 'Building A, Floor 2', 60, 'Auditorium');
INSERT INTO Room (r_id, r_location, numplace, r_type) VALUES (5, 'Building D, Floor 1', 35, 'Seminar Room');
INSERT INTO Room (r_id, r_location, numplace, r_type) VALUES (6, 'Building B, Floor 1', 45, 'Conference Room');
INSERT INTO Room (r_id, r_location, numplace, r_type) VALUES (7, 'Building C, Floor 2', 55, 'Workshop Room');
INSERT INTO Room (r_id, r_location, numplace, r_type) VALUES (8, 'Building D, Floor 2', 25, 'Computer Lab');
INSERT INTO Room (r_id, r_location, numplace, r_type) VALUES (9, 'Building A, Floor 3', 70, 'Training Center');
INSERT INTO Room (r_id, r_location, numplace, r_type) VALUES (10, 'Building B, Floor 3', 20, 'Discussion Room');

--StudentsGroup
INSERT INTO StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_id, l_id) VALUES (1, 25, 9, 1, 1, 1, 114);
INSERT INTO StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_id, l_id) VALUES (2, 20, 10, 2, 2, 2, 113);
INSERT INTO StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_id, l_id) VALUES (3, 30, 11, 3, 3, 3, 118);
INSERT INTO StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_id, l_id) VALUES (4, 35, 13, 4, 4, 4, 112);
INSERT INTO StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_id, l_id) VALUES (5, 40, 14, 5, 5, 5, 117);
INSERT INTO StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_id, l_id) VALUES (6, 45, 15, 6, 6, 6, 115);
INSERT INTO StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_id, l_id) VALUES (7, 50, 9, 7, 7, 7, 116);
INSERT INTO StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_id, l_id) VALUES (8, 55, 10, 1, 8, 8, 119);
INSERT INTO StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_id, l_id) VALUES (9, 60, 11, 2, 9, 9, 111);
INSERT INTO StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_id, l_id) VALUES (10, 25, 13, 3, 10, 10, 120);

--uses
INSERT INTO uses (c_id, e_id) VALUES (1, 1);

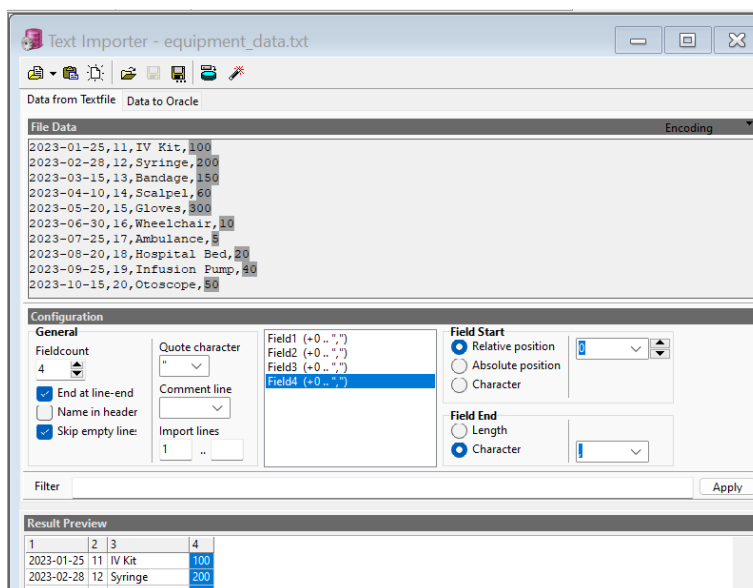
```

```

INSERT INTO uses (c_id, e_id) VALUES (2, 10);
INSERT INTO uses (c_id, e_id) VALUES (3, 7);
INSERT INTO uses (c_id, e_id) VALUES (4, 2);
INSERT INTO uses (c_id, e_id) VALUES (5, 5);
INSERT INTO uses (c_id, e_id) VALUES (6, 4);
INSERT INTO uses (c_id, e_id) VALUES (7, 6);
INSERT INTO uses (c_id, e_id) VALUES (8, 9);
INSERT INTO uses (c_id, e_id) VALUES (9, 1);
INSERT INTO uses (c_id, e_id) VALUES (10, 3);
--belongs
INSERT INTO belongs (g_id, p_id) VALUES (1, 101);
INSERT INTO belongs (g_id, p_id) VALUES (2, 102);
INSERT INTO belongs (g_id, p_id) VALUES (3, 103);
INSERT INTO belongs (g_id, p_id) VALUES (4, 104);
INSERT INTO belongs (g_id, p_id) VALUES (5, 105);
INSERT INTO belongs (g_id, p_id) VALUES (6, 106);
INSERT INTO belongs (g_id, p_id) VALUES (7, 107);
INSERT INTO belongs (g_id, p_id) VALUES (8, 108);
INSERT INTO belongs (g_id, p_id) VALUES (9, 109);
INSERT INTO belongs (g_id, p_id) VALUES (10, 110);
--teaches_the
INSERT INTO teaches_the (l_id, c_id) VALUES (111, 1);
INSERT INTO teaches_the (l_id, c_id) VALUES (112, 4);
INSERT INTO teaches_the (l_id, c_id) VALUES (113, 2);
INSERT INTO teaches_the (l_id, c_id) VALUES (114, 1);
INSERT INTO teaches_the (l_id, c_id) VALUES (115, 6);
INSERT INTO teaches_the (l_id, c_id) VALUES (116, 7);
INSERT INTO teaches_the (l_id, c_id) VALUES (117, 5);
INSERT INTO teaches_the (l_id, c_id) VALUES (118, 3);
INSERT INTO teaches_the (l_id, c_id) VALUES (119, 8);
INSERT INTO teaches_the (l_id, c_id) VALUES (120, 10);

```

- הכנסת נתונים ע"י קובץ txt:
לטבלה Equipment



Text Importer - equipment_data.txt

Data from Textfile Data to Oracle

General

Owner: EQUIPMENT

Table: EQUIPMENT

Commit every...: 0

Overwrite duplicates: ☐

Ignore duplicates: ☒

Initializing Script: ...

Finalizing Script: ...

Fields

Field1 -> E_DATE (DATE)

Field2 -> E_ID (NUMBER)

Field3 -> E_NAME (VARCHAR2)

Field4 -> AMOUNT (NUMBER)

Field: AMOUNT (NUMBER)

Fieldtype: Number

Create SQL: ...

SQL function: ...

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

Result Preview

1	2	3	4
2023-01-25	11	IV Kit	100
2023-02-28	12	Syringe	200

	E_DATE	E_ID	E_NAME	AMOUNT
1	15/01/2023	1	First Aid Kit	50
2	20/02/2023	2	Stethoscope	30
3	10/03/2023	3	Blood Pressure Monitor	70
4	05/04/2023	4	Thermometer	20
5	15/05/2023	5	Glucose Meter	40
6	25/06/2023	6	Oxygen Tank	25
7	30/07/2023	7	Defibrillator	60
8	15/08/2023	8	Surgical Gloves	350
9	10/09/2023	9	Face Mask	500
10	28/02/2023	12	Syringe	200
11	05/10/2023	10	CPR Manikin	15
12	25/01/2023	11	IV Kit	100
13	15/03/2023	13	Bandage	150
14	10/04/2023	14	Scalpel	60
15	20/05/2023	15	Gloves	300
16	30/06/2023	16	Wheelchair	10
17	25/07/2023	17	Ambulance	5
18	20/08/2023	18	Hospital Bed	20
19	25/09/2023	19	Infusion Pump	40
20	15/10/2023	20	Otoscope	50

לטבלה Courses:

Text Importer - courses_data.txt

Data from Textfile Data to Oracle

File Data

Encoding: ...

Basic Life Support,11,Medical,Required,None

First Aid Cert,12,Medical,Required,Basic Life Support

EM Technician,13,Medical,Required,First Aid Cert

Adv Trauma Life Sup,14,Medical,Required,Basic Life Support

Ped Adv Life Support,15,Medical,Required,Basic Life Support

Fire Safety Training,16,Safety,Required,None

Disaster Response,17,Management,Optional,Fire Safety Training

Occupational Health,18,Safety,Required,None

Remote Emerg Care,19,Medical,Optional,First Aid Cert

Epidemic Preparedness,20,Medical,Required,Occupational Health

Configuration

General

Fieldcount: 5

End at line-end: ☒

Name in header: ☐

Skip empty line: ☒

Quote character: "

Comment line: ...

Import lines: 1 ..

Field1 (+0..,")

Field2 (+0..,")

Field3 (+0..,")

Field4 (+0..,")

Field5 (+0..,")

Field Start

Relative position: ☒

Absolute position: ☐

Character: ☐

Field End

Length: ☐

Character: ☒

Filter: ...

Apply

Result Preview

1	2	3	4	5
Basic Life Support	11	Medical	Required	None
First Aid Cert	12	Medical	Required	Basic Life Support

Text Importer - courses_data.txt

Data from Textfile Data to Oracle

General

Owner: COURSES Table: Clear Table

Commit every... 0 Overwrite duplicates Ignore duplicates

Initializing Script Finalizing Script

Fields

Field1 -> C_NAME (VARCHAR2)
Field2 -> C_ID (NUMBER)
Field3 -> CATEGORIES (VARCHAR2)
Field4 -> PRESENCE (VARCHAR2)
Field5 -> PRE_COURSE (VARCHAR2)

Field: PRE_COURSE (VARCH
Fieldtype: String
Create SQL
SQL function: additional Oracle processing, for example: substr(%, 1, 20)

Result Preview

1	2	3	4	5
Basic Life Support	11	Medical	Required	None
First Aid Cert	12	Medical	Required	Basic Life Support

	C_NAME	C_ID	CATEGORIES	PRESENCE	PRE_COURSE
1	Basic First Aid	1	Medical	Required	None
2	CPR	2	Medical	Required	Basic First Aid
3	Advanced Life Support	3	Medical	Required	CPR
4	Trauma Care	4	Medical	Required	Basic First Aid
5	Pediatric Care	5	Medical	Required	Basic First Aid
6	Emergency Response	6	Medical	Required	None
7	Disaster Management	7	Management	Optional	Emergency Response
8	Health and Safety	8	Safety	Required	None
9	Wilderness First Aid	9	Medical	Optional	Basic First Aid
10	Infection Control	10	Medical	Required	Health and Safety
11	Basic Life Support	11	Medical	Required	None
12	First Aid Cert	12	Medical	Required	Basic Life Support
13	EM Technician	13	Medical	Required	First Aid Cert
14	Adv Trauma Life Sup	14	Medical	Required	Basic Life Support
15	Ped Adv Life Support	15	Medical	Required	Basic Life Support
16	Fire Safety Training	16	Safety	Required	None
17	Disaster Response	17	Management	Optional	Fire Safety Training
18	Occupational Health	18	Safety	Required	None
19	Remote Emerg Care	19	Medical	Optional	First Aid Cert
20	Epidemic Preparedness	20	Medical	Required	Occupational Health

- הכנסת נתונים ע"י mockaroo:
לטבלה Room:

Field Name Type Options

r_id Sequence start at: 11 step: 1 repeat: 1 restart at: 40 blank: 0 %

r_location Formula - ("A".ord + random(0, 3)).chr + ", Floor " + random(1, 3).to blank: 0 %

numplace Number min: 30 max: 60 decimals: 0 blank: 0 %

r_type Custom List Classroom, Lecture Hall, Training Room, Seminar Room, Comp sequential blank: 0 %

SQL Window - Room.sql

SQL Output Statistics

```

insert into Room (r_id, r_location, numplace, r_type) values (11, 'Building D, Floor 2', 49, 'Classroom');
insert into Room (r_id, r_location, numplace, r_type) values (12, 'Building C, Floor 3', 32, 'Lecture Hall');
insert into Room (r_id, r_location, numplace, r_type) values (13, 'Building D, Floor 3', 44, 'Training Room');
insert into Room (r_id, r_location, numplace, r_type) values (14, 'Building A, Floor 1', 47, 'Seminar Room');
insert into Room (r_id, r_location, numplace, r_type) values (15, 'Building D, Floor 3', 30, 'Computer Lab');
insert into Room (r_id, r_location, numplace, r_type) values (16, 'Building B, Floor 1', 48, 'Auditorium');
insert into Room (r_id, r_location, numplace, r_type) values (17, 'Building A, Floor 1', 43, 'Conference Room');
insert into Room (r_id, r_location, numplace, r_type) values (18, 'Building B, Floor 1', 32, 'Workshop Room');
insert into Room (r_id, r_location, numplace, r_type) values (19, 'Building D, Floor 3', 55, 'Training Center');
insert into Room (r_id, r_location, numplace, r_type) values (20, 'Building C, Floor 2', 57, 'Discussion Room');

```

	R_ID	R_LOCATION	NUMPLACE	R_TYPE
1	11	Building D, Floor 2	49	Classroom
2	12	Building C, Floor 3	32	Lecture Hall
3	13	Building D, Floor 3	44	Training Room
4	14	Building A, Floor 1	47	Seminar Room
5	1	Building A, Floor 1	50	Classroom
6	2	Building B, Floor 2	40	Lecture Hall
7	3	Building C, Floor 3	30	Training Room
8	4	Building A, Floor 2	60	Auditorium
9	5	Building D, Floor 1	35	Seminar Room
10	6	Building B, Floor 1	45	Conference Room
11	7	Building C, Floor 2	55	Workshop Room
12	8	Building D, Floor 2	25	Computer Lab
13	9	Building A, Floor 3	70	Training Center
14	10	Building B, Floor 3	20	Discussion Room
15	15	Building D, Floor 3	30	Computer Lab
16	16	Building B, Floor 1	48	Auditorium
17	17	Building A, Floor 1	43	Conference Room
18	18	Building B, Floor 1	32	Workshop Room
19	19	Building D, Floor 3	55	Training Center
20	20	Building C, Floor 2	57	Discussion Room

StudentsGroup: לטבלה

Field Name	Type	Options
g_id	Sequence	start at: 11 step: 1 repeat: 1 restart at: 40 blank: 0 %
Max_p	Number	min: 30 max: 60 decimals: 0 blank: 0 %
g_hour	Number	min: 8 max: 20 decimals: 0 blank: 0 %
g_day	Number	min: 1 max: 5 decimals: 0 blank: 0 %
r_id	Sequence	start at: 1 step: 1 repeat: 1 restart at: 40 blank: 0 %
c_id	Sequence	start at: 1 step: 1 repeat: 1 restart at: 40 blank: 0 %
l_id	Sequence	start at: 120 step: -1 repeat: 1 restart at: 40 blank: 0 %

```

SQL Window - StudentsGroup.sql
SQL Output Statistics
insert into StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_id, l_id) values (11, 51, 18, 1, 1, 1, 120);
insert into StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_id, l_id) values (12, 46, 11, 5, 2, 2, 119);
insert into StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_id, l_id) values (13, 35, 9, 2, 3, 3, 118);
insert into StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_id, l_id) values (14, 30, 17, 4, 4, 4, 117);
insert into StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_id, l_id) values (15, 46, 9, 3, 5, 5, 116);
insert into StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_id, l_id) values (16, 52, 11, 4, 6, 6, 115);
insert into StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_id, l_id) values (17, 47, 8, 5, 7, 7, 114);
insert into StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_id, l_id) values (18, 31, 16, 3, 8, 8, 113);
insert into StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_id, l_id) values (19, 40, 15, 3, 9, 9, 112);
insert into StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_id, l_id) values (20, 36, 11, 5, 10, 10, 111);

```

	G_ID	MAX_P	G_HOUR	G_DAY	R_ID	C_ID	L_ID
1	11	51	18	1	1	1	120
2	12	46	11	5	2	2	119
3	13	35	9	2	3	3	118
4	14	30	17	4	4	4	117
5	15	46	9	3	5	5	116
6	16	52	11	4	6	6	115
7	17	47	8	5	7	7	114
8	18	31	16	3	8	8	113
9	19	40	15	3	9	9	112
10	20	36	11	5	10	10	111
11	1	25	9	1	1	1	114
12	2	20	10	2	2	2	113
13	3	30	11	3	3	3	118
14	4	35	13	4	4	4	112
15	5	40	14	5	5	5	117
16	6	45	15	6	6	6	115
17	7	50	9	7	7	7	116
18	8	55	10	1	8	8	119
19	9	60	11	2	9	9	111
20	10	25	13	3	10	10	120

• הכנסת נתונים ע"י data generator:
לטבלה Lecturers:

Data Generator - New

LECTURERS

Owner: SYS Table: LECTURERS Number of records: 400

Name	Type	Size	Data	Master
L_ID	NUMBER	10	Sequence(100,1)	...
L_NAME	VARCHAR2	30	FirstName + LastName	...
L_DATE	DATE	...	Random(01/01/1970, 01/01/2000)	...
SENIORITY	VARCHAR2	30	Random(1, 30)	...
TRAINING	VARCHAR2	30	List('Infection Control', 'Health and Safety', 'Advanced Life Support', 'Pediatric Care', 'Disaster Management', 'Emergency Response', 'First Aid', 'CPR

Definition Options Result

L_ID	L_NAME	L_DATE	SENIORITY	TRAINING
1	LiquidShannon	26/02/1996	4	Advanced Life Support
2	SarahDouglas	08/02/1992	13	Health and Safety
3	MiriamGoodman	30/08/1981	22	Health and Safety
4	LynetteMcDonald	08/01/1977	21	Medical
5	SalmaTheron	08/12/1976	11	Infection Control
6	HarrisonQuaid	04/03/1973	20	Infection Control
7	GeorgeLofgren	05/01/1993	29	CPR
8	KimberlyFuray	21/12/1996	10	Pediatric Care'Disaster Manag
9	JuanCromwell	06/10/1978	15	CPR
10	JeanLonsdale	14/12/1989	27	Advanced Life Support
11	KayJanssen	22/03/1997	22	Health and Safety
12	SaraForrest	02/12/1977	8	Infection Control
13	NikkaHudson	04/05/1979	4	Infection Control
14	GlenStallone	17/02/1998	8	Advanced Life Support
15	AndreWeston	01/02/1972	26	First Aid
16	SallyBachman	10/08/1975	30	Trauma Care
17	LorraineOrton	01/12/1982	19	Health and Safety
18	FisherBurton	04/02/1980	19	Advanced Life Support

לטבלה Participants:

Data Generator - participants.gd

PARTICIPANTS

Owner: SYS Table: PARTICIPANTS Number of records: 400

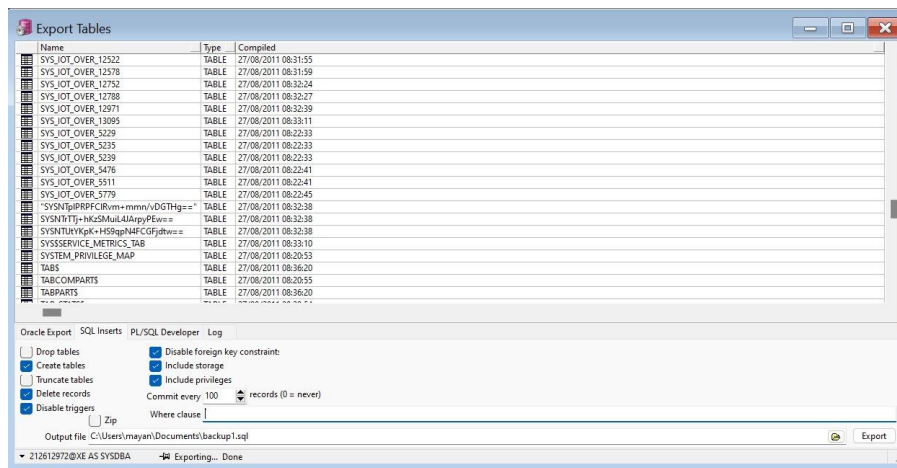
Name	Type	Size	Data	Master
P_NAME	VARCHAR2	30	FirstName + LastName	...
P_DATE	DATE	...	Random(01/01/1970, 01/01/2000)	...
P_ID	NUMBER	10	Sequence(500,1)	...
P_ROLE	VARCHAR2	30	List('First Responder', 'Paramedic', 'Certified Nurse', 'First Responder', 'EMT')	...
GENDER	VARCHAR2	30	List(female, male)	...

Definition Options Result

P_NAME	P_DATE	P_ID	P_ROLE	GENDER
1 FrancoEsposito	12/06/1973	800	First Responder	female
2 EmmArkenstone	08/10/1992	801	EMT	female
3 PercyPigott-Smith	30/07/1986	802	First Responder	female
4 MarkFisher	28/02/1974	803	Certified Nurse	female
5 MollyRooker	12/05/1983	804	Paramedic	male
6 JohnnyTwilley	03/10/1978	805	Paramedic	female
7 MikaStone	15/07/1973	806	First Responder	female
8 JodyMoriarty	10/11/1986	807	EMT	female
9 DelbertFrancis	12/01/1974	808	First Responder	female
10 EdwardBall	01/01/1972	809	First Responder	male
11 LeVarCurfman	01/01/1974	810	Certified Nurse	female
12 AlessandroCreek	05/11/1994	811	EMT	female
13 WilliamPfeiffer	17/10/1997	812	Certified Nurse	male
14 Maefavreau	24/06/1993	813	EMT	male
15 WadeFlack	21/08/1987	814	Paramedic	male
16 QueenValentin	06/05/1974	815	Certified Nurse	female
17 MillieSummer	27/12/1991	816	Certified Nurse	female
18 TimothyVinton	05/03/1991	817	EMT	male
19 SheenaBalk	19/08/1988	818	First Responder	female
20 JaneaneSchneider	21/03/1990	819	First Responder	male
21 FrankieTravolta	01/10/1982	820	EMT	male
22 MauraTwilley	23/10/1975	821	Paramedic	male
23 PeteStormare	13/01/1994	822	First Responder	male
24 LaurenDomino	26/08/1992	823	First Responder	female
25 CaseyGoldwyn	09/10/1972	824	First Responder	female
26 NickelFonda	19/03/1997	825	First Responder	male
27 RoddyKirkwood	01/10/1996	826	First Responder	female
28 ChuckDean	13/09/1971	827	EMT	male
29 MarlonGershon	30/10/1988	828	First Responder	male

גיבוי ושחזור נתונים

ביצוע גיבוי במחשב אחד:



שיחזור על מחשב השני:



וכעת כל הטבלאות מלאות:

