# מיני פרויקט בסיסי נתונים

# מגישות:

הילה חג'בי: 213899412

212612972 :מעיין אלקיים

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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 מדן ועד אילת, פועל 24/7, גם בשבתות וחגים.

. המתנדבים מגישים סיוע רפואי חינם 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
- p id (מזהה) ח.ז של משתתף ת.ז של משתתף
  - רספףיד של משתתף. role
    - -p\_name p\_name
      - .agender גבר/ אישה.
- אריך לידה של משתתף -p\_date
  - 2. קבוצה: StudentGroup
  - g\_id (מַזהה) של קבוצה ת.ז של
- g hour שעה בלוח זמנים שבה מתקיים הקורס של אותה קבוצה -g hour
  - יום בלוח זמנים שבה מתקיים הקורס של אותה קבוצה -g\_day
    - Max\_p מספר מקסימלי של משתתפים. •

#### Room: .3

- <u>r\_id (מזהה) ת.ז של חדר</u>
- סיקום החדר שבו מתקיים הקורס. location
  - חumplace מס מקומות ישיבה בחדר.
    - a type מעבדה / אולם /שטח.
      - Equipment : ציוד רפואי
    - e\_id (מזהה) ת.ז של צי<u>וד רפואי</u>
      - ת.ז של ציוד -e id ●
    - תאריך תפוגה של ציוד. -e\_date ●
- -amount הכמות הכוללת של פריט הציוד הזמין במלאי.

- 5. קורסים: Courses
- <u>c\_ld (מזהה) ת.ז של קורס</u>
  - .C\_name •
- categories סטגוריה של קורס (חובשים/ מגיש עזרה ראשונה/ החייאה).
  - pre-course דרישות קדם לקורס הנוכחי.
    - presence נוכחות חובה בקורס (T/F).
      - lecturers:מרצים
      - <u>I\_ld (מזהה) של מרצה (ת.ז של מרצה</u>
        - . שם של מרצה l\_name
          - .תאריך לידה -l\_date •
      - seniority ותק של מרצה.
      - training. •

## :קשרים

- StudentGroup Room (M)  $\Leftrightarrow$  (1). 1 Scheduled In : Relation Name
- StudentGroup (M) ⇔ (M) Participants . .2

  Relation Name: belongs
  - StudentGroup (1) ⇔ (M) lecturers . .3

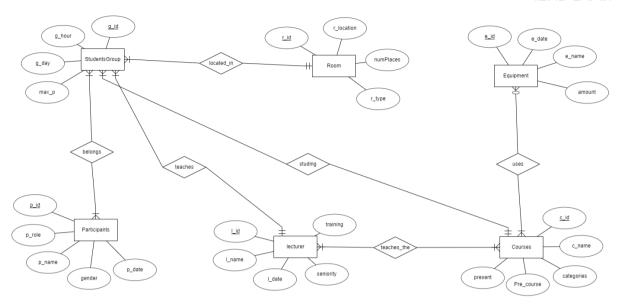
    Relation Name: teaches
  - StudentGroup (1) ⇔ (M) lecturers . 4

    Relation Name: teaches
    - lecturers (M) ⇔ (M) Courses. ..5

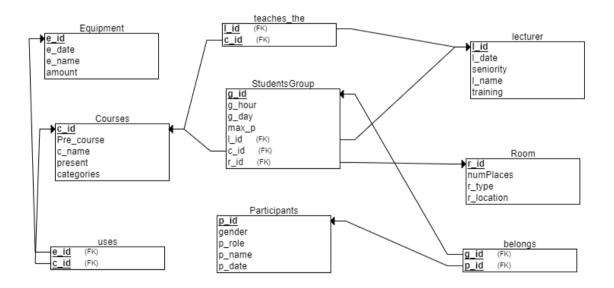
      Relation Name: teaches\_the
    - Courses (M) ⇔ (M) Equipment. . .6

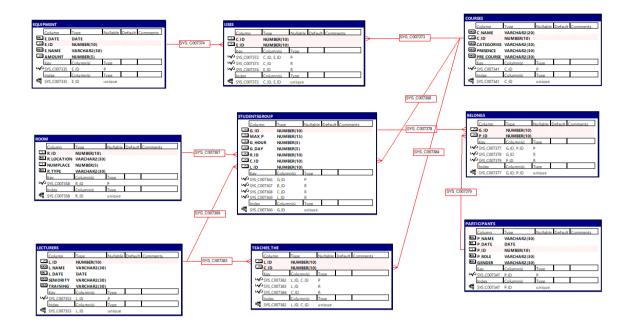
      Relation Name: teaches

# :ERD תרשים



## :DSD תרשים





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_ld NUMBER(10) NOT NULL,
 categories VARCHAR2(30) NOT NULL,
presence VARCHAR2(30) NOT NULL,
pre_course VARCHAR2(30) NOT NULL,
 PRIMARY KEY (c_ld)
);
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
I_Id NUMBER(10) NOT NULL,
I_name VARCHAR2(30) NOT NULL,
```

```
I_date DATE NOT NULL,
 seniority VARCHAR2(30)NOT NULL,
 training VARCHAR2(30) NOT NULL,
 PRIMARY KEY (I_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,
I_Id NUMBER(10) NOT NULL,
 PRIMARY KEY (g_id),
 FOREIGN KEY (r_id) REFERENCES Room(r_id),
 FOREIGN KEY (c_ld) REFERENCES Courses(c_ld),
 FOREIGN KEY (I_Id) REFERENCES lecturers(I_Id)
);
CREATE TABLE uses
 c_ld NUMBER(10)NOT NULL,
 e_id NUMBER(10)NOT NULL,
 PRIMARY KEY (c_ld, e_id),
 FOREIGN KEY (c_ld) REFERENCES Courses(c_ld),
 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
I_Id NUMBER(10) NOT NULL,
 c Id NUMBER(10) NOT NULL,
 PRIMARY KEY (I_Id, c_Id),
 FOREIGN KEY (I_Id) REFERENCES lecturers(I_Id),
 FOREIGN KEY (c_ld) REFERENCES Courses(c_ld)
);
```

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\_ld, 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\_ld, categories, presence, pre\_course) VALUES ('Advanced Life Support', 3, 'Medical', 'Required', 'CPR');

INSERT INTO Courses (C\_name, c\_ld, categories, presence, pre\_course) VALUES ('Trauma Care', 4, 'Medical', 'Required', 'Basic First Aid'):

INSERT INTO Courses (C\_name, c\_ld, categories, presence, pre\_course) VALUES ('Pediatric Care', 5, 'Medical', 'Required', 'Basic First Aid');

INSERT INTO Courses (C\_name, c\_ld, categories, presence, pre\_course) VALUES ('Emergency Response', 6, 'Medical', 'Required', 'None');

INSERT INTO Courses (C\_name, c\_ld, categories, presence, pre\_course) VALUES ('Disaster Management', 7, 'Management', 'Optional', 'Emergency Response');

INSERT INTO Courses (C\_name, c\_ld, categories, presence, pre\_course) VALUES ('Health and Safety', 8, 'Safety', 'Required', 'None');

INSERT INTO Courses (C\_name, c\_ld, categories, presence, pre\_course) VALUES ('Wilderness First Aid', 9, 'Medical', 'Optional', 'Basic First Aid');

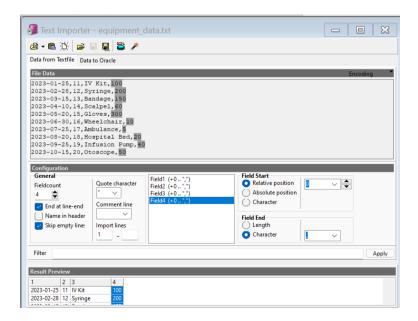
INSERT INTO Courses (C\_name, c\_ld, categories, presence, pre\_course) VALUES ('Infection Control', 10, 'Medical', 'Required', 'Health and Safety');

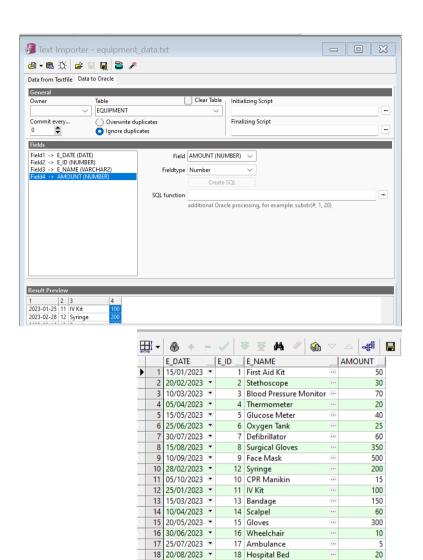
--Participants

```
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 (I_Id, I_name, I_date, seniority, training) VALUES (111, 'Dr. Emily White', TO_DATE('2022-
01-15', 'YYYY-MM-DD'), 'Senior', 'Medical');
INSERT INTO lecturers (I_Id, I_name, I_date, seniority, training) VALUES (112, 'Prof. John Miller', TO_DATE('2021-
02-20', 'YYYY-MM-DD'), 'Expert', 'Trauma Care');
INSERT INTO lecturers (I_Id, I_name, I_date, seniority, training) VALUES (113, 'Dr. Sarah Thompson',
TO DATE('2020-03-10', 'YYYY-MM-DD'), 'Intermediate', 'CPR');
INSERT INTO lecturers (I_Id, I_name, I_date, seniority, training) VALUES (114, 'Mr. Michael Brown',
TO_DATE('2019-04-05', 'YYYY-MM-DD'), 'Junior', 'First Aid');
INSERT INTO lecturers (I_Id, I_name, I_date, seniority, training) VALUES (115, 'Mrs. Anna Wilson', TO_DATE('2018-
05-15', 'YYYY-MM-DD'), 'Senior', 'Emergency Response');
INSERT INTO lecturers (I_Id, I_name, I_date, seniority, training) VALUES (116, 'Ms. Laura Davis', TO_DATE('2017-
06-25', 'YYYY-MM-DD'), 'Expert', 'Disaster Management');
INSERT INTO lecturers (I_Id, I_name, I_date, seniority, training) VALUES (117, 'Dr. Kevin Clark', TO_DATE('2016-
07-30', 'YYYY-MM-DD'), 'Intermediate', 'Pediatric Care');
INSERT INTO lecturers (I. Id., I. name, I. date, seniority, training) VALUES (118, 'Prof. Jessica Lewis',
TO_DATE('2015-08-15', 'YYYY-MM-DD'), 'Senior', 'Advanced Life Support');
INSERT INTO lecturers (I_Id, I_name, I_date, seniority, training) VALUES (119, 'Mr. Brian Walker', TO_DATE('2014-
09-10', 'YYYY-MM-DD'), 'Junior', 'Health and Safety');
INSERT INTO lecturers (I_Id, I_name, I_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_ld, l_ld) VALUES (1, 25, 9, 1, 1, 1, 114);
INSERT INTO StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_ld, l_ld) VALUES (2, 20, 10, 2, 2, 2, 113);
INSERT INTO StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_ld, l_ld) VALUES (3, 30, 11, 3, 3, 3, 118);
INSERT INTO StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_ld, l_ld) VALUES (4, 35, 13, 4, 4, 4, 112);
INSERT INTO StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_ld, l_ld) VALUES (5, 40, 14, 5, 5, 5, 117);
INSERT INTO StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_ld, l_ld) VALUES (6, 45, 15, 6, 6, 6, 115);
INSERT INTO StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_ld, l_ld) VALUES (7, 50, 9, 7, 7, 7, 116);
INSERT INTO StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_ld, l_ld) VALUES (8, 55, 10, 1, 8, 8, 119);
INSERT INTO StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_ld, l_ld) VALUES (9, 60, 11, 2, 9, 9, 111);
INSERT INTO StudentsGroup (g_id, Max_p, g_hour, g_day, r_id, c_ld, l_ld) VALUES (10, 25, 13, 3, 10, 10, 120);
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_ld, e_id) VALUES (10, 3);
--belonas
INSERT INTO belongs (q 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 (I_Id, c_Id) VALUES (111, 1);
INSERT INTO teaches_the (I_Id, c_Id) VALUES (112, 4);
INSERT INTO teaches_the (I_Id, c_Id) VALUES (113, 2);
INSERT INTO teaches_the (I_Id, c_Id) VALUES (114, 1);
INSERT INTO teaches_the (I_Id, c_Id) VALUES (115, 6);
INSERT INTO teaches_the (I_Id, c_Id) VALUES (116, 7);
INSERT INTO teaches the (I Id, c Id) VALUES (117, 5);
INSERT INTO teaches_the (I_Id, c_Id) VALUES (118, 3);
INSERT INTO teaches_the (I_Id, c_Id) VALUES (119, 8);
INSERT INTO teaches_the (I_Id, c_Id) VALUES (120, 10);
```

<u>הכנסת נתונים ע"י קובץ txt:</u>לטבלה Equipment:

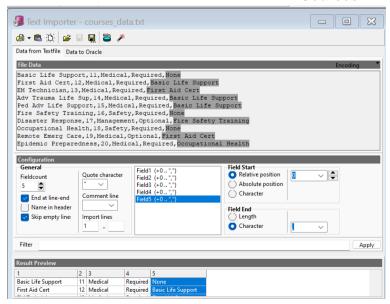




#### :Courses לטבלה

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50

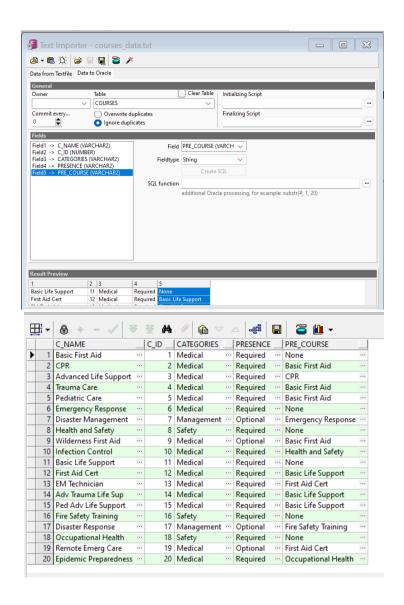


19 25/09/2023 -

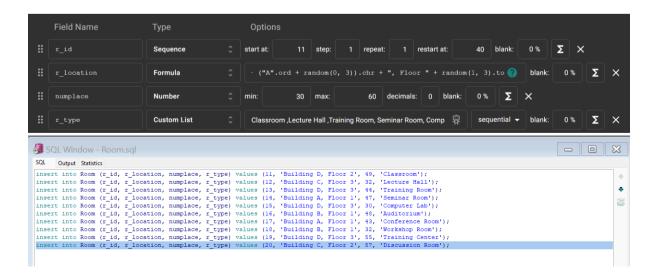
20 15/10/2023 \*

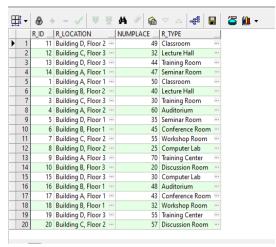
19 Infusion Pump

20 Otoscope

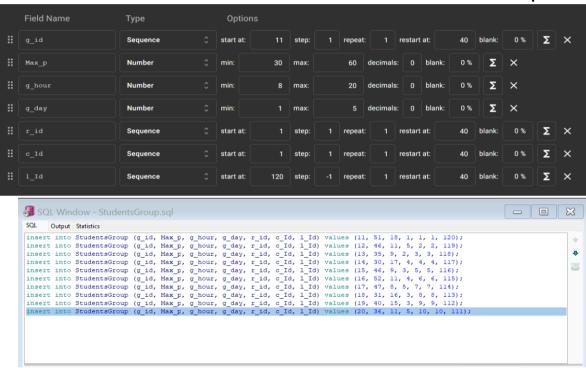


# • <u>הכנסת נתונים ע"י mockaroo:</u> לטבלה **Room**:



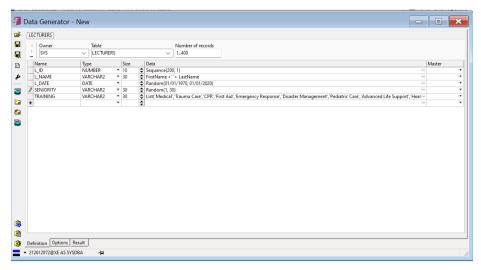


לטבלה: StudentsGroup



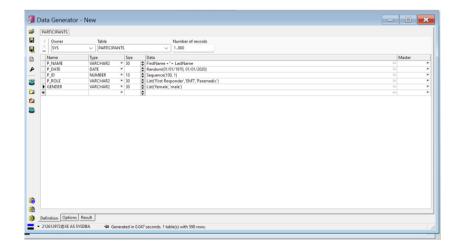
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		G_ID	MAX_P	G_HOUR	G_DAY	R_ID	C_ID	L_ID
Þ	- 1	11	51	18	1	1	1	120
	2	12	46	11	5	2	2	119
	3	13	35	9	2	3	3	118
	4	14	30	17	4	4	4	117
	5	15	46	9	3	5	5	116
	6	16	52	11	4	6	6	115
	7	17	47	8	5	7	7	114
	8	18	31	16	3	8	8	113
	9	19	40	15	3	9	9	112
	10	20	36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

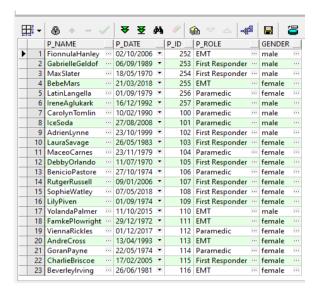
# • <u>הכנסת נתונים ע"י data generator:</u> tocters:





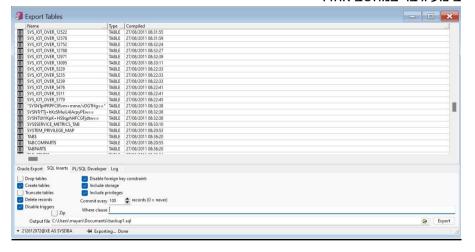
# :Participants



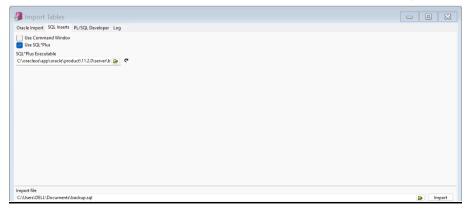


#### גיבוי ושחזור נתונים

#### ביצוע גיבוי במחשב אחד:



#### שיחזור על מחשב השני:



## וכעת כל הטבלאות מלאות:

