**משימה – MySQL**

**מטרה**

במשימה זו נתרגל עבודה בשפת שאילתות SQL בסביבת MySQL ותוכנת ה-UI הפופולרית Workbench

**דרישות**

* התקנה של MySQL & Workbench
* הכרות עם SQL Tab לכתיבת שאילתות בצורה תכנותית
* הכרות עם ה-UI Wizard ליצירת שאילתות בצורה גרפית

**מקרא מפה**

* PK – Primary Key – מפתח ראשי
* AI - Auto Increment – שדה רץ ממוספר אוטומטית
* NN – No Null – חובה לאתחל את השדה

**סוגי שאילתות**

* DDL - Data Definition Language
  + CREATE
  + DROP
  + ALTER
* DML – Data Manipulation Language
  + INSERT
  + UPDATE
  + DELETE
* DQL – Data Query Language
  + SELECT

**משימה**

1. Create a new schema **java822**
2. Drop the schema **java822**
3. Recreate the schema **java822** again
4. Create the next schemas:
   1. Java-123
   2. Java-456
   3. Java-789
   4. Java-{your-course-number}
5. Set (use) your course schema as the default schema
6. Create a new table **gym\_members** under the selected schema

* **id**: **int – PK AI NN**
* **name**: **varchar(30) NN**
* **city**: **varchar(30) NN**
* **phone\_number**: **varchar(11) NN**
* **age**: **double NN**

1. Insert a new gym member

* name - Kobi
* city - TLV
* phone - 054-9519512
* age: 30

1. Insert a new gym member

* name - Daniel
* city - Chicago
* phone - 054-1212512
* age: 33.4

1. Insert a new gym member

* name - Shimmy
* city - TLV
* phone - 052-8412516
* age: 19.7

1. Insert a new gym member

* name - Danit
* city - JLM
* phone - 055-4511618
* age: 34

1. Insert a new gym member

* name - Mazal
* city - Orlando
* phone - 052-2222555
* age: 26

1. Insert a new gym member

* name - Shimmy
* city - TLV
* phone - 052-8412517
* age: 18.3

1. Select all gym members
2. Select all gym members named **Shimmy**
3. Select all gym members named **Daniel**
4. Select all gym members that their phone **starts with 054**
5. Select all gym members that their phone is **ends with 16**
6. Select all gym members that their phone number **contains 12**
7. Select all gym members that are **older than** 30 years old
8. Update shimmy's phone number into 050-9999999, What’s wrong?
9. Insert a new gym member

* name - Victor
* city - TLV
* phone - 052-4323410
* age: 28.7

1. Select all gym members
2. Calc the **avg age** among the gym members
3. Calc the **total age** among the gym members
4. Calc the **total age** among the gym members which **lives in TLV**
5. Calc **how many** members we have?
6. Calc **how many** members we have which **lives in TLV**
7. Delete gym member which his name is Shimmy, What’s wrong?
8. Delete gym member that his id is 3
9. Check if id 4 exists (Boolean value: 0 or 1)
10. Check if id 3 exists (Boolean value: 0 or 1)
11. Select all gym members which **lives in TLV and age Over 20**
12. Select all gym members which **do not live in TLV and age Under 26**
13. Save the script as sql file
14. Close the tab
15. Open the file and load scripts

**בהצלחה!**