



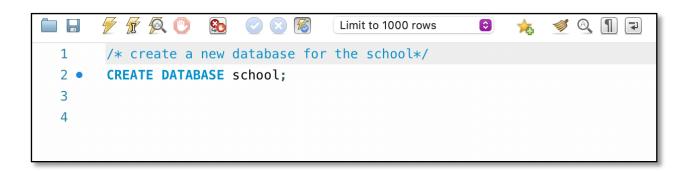
## مشروع ۱

باستخدام ماتعلمته خلال هذهِ الدورة قم بتطبيق الآتي: لنفترض أن هناك مدرسة باسم التميز للتعليم الثانوي، ونريد إنشاء قاعدة بيانات مركزية لتضم جميع معلومات المعلمين والطلاب والمواد، مع العلم أنه يجب تخزين المعلومات الآتية لكل طالب (الرقم التسلسلي للطالب، اسم الطالب، تاريخ الميلاد، جنس الطالب، تاريخ الالتحاق، البريد الإلكتروني للطالب، المستوى الدراسي، المسار، المعدل التراكمي للطالب) ومعلومات المعلمين كالآتي(الرقم التسلسلي للمعلم، اسم المعلم، تاريخ الميلاد، جنس المعلم، البريد الالكتروني للمعلم، رقم المكتب) ومعلومات المواد كالآتي (الرقم التسلسلي للمادة، اسم المادة

## المتطلبات

\* لتوضيح الأوامر commentsاستخدام التعليقات

\* إنشاء قاعدة البيانات



SQL 1



المتدربة بتول الغامدي المشرفة في العتيبي مجموعة البحر الأحمر

إنشاء الجداول

```
-- create tables (students, teachers, classes)
1
2 •
         USE highschool;
3 • CREATE TABLE students(
         id INT PRIMARY KEY,
5
         StudentName VARCHAR(225),
6
         DOB DATE ,
7
         SEX VARCHAR(225),
         startDate Date ,
9
         studentEmail VARCHAR(225),
10
         academicLevel INT,
11
         StudentTrack VARCHAR(225),
         GPA INT
12
13
       );
14
15 • CREATE TABLE teachers(
         ID INT PRIMARY KEY,
16
         teacherName VARCHAR(225),
17
18
         DOB DATE ,
19
         SEX VARCHAR(225),
         teacherEmail VARCHAR(225),
20
         officeNumber INT
21
22
        - );
23
   • (—) CREATE TABLE classes(
24
25
         Id INT PRIMARY KEY,
        - className VARCHAR(225)
26
27
         );
```



عرض الجداول المتاحة في قاعدة البيانات

|   | Tables_in_school |  |  |  |  |  |  |
|---|------------------|--|--|--|--|--|--|
| ▶ | classes          |  |  |  |  |  |  |
|   | students         |  |  |  |  |  |  |
|   | teachers         |  |  |  |  |  |  |
|   |                  |  |  |  |  |  |  |

إدخال معلومات ٣٠ طالب كحد أدني



إدخال معلومات ١٠ معلمين كحد أدنى

```
INSERT INTO teachers

VALUES (2220, "Hatem","1997-09-29", "M", "hat@mail.com",654),
  (3330, "Ghaith","1997-08-04", "M", "ghaith@mail.com",678),
  (4440, "Ghassan","1997-09-07", "M", "ghass@mail.com",876),
  (5550, "Erjwan","1997-09-03", "F", "er@mail.com",789),
  (2121, "Hussam","1997-09-09", "M", "Hussam@mail.com",222),
  (4534, "Ezz","1997-08-04", "M", "Ezz@mail.com",345),
  (7865, "Hattan","1997-09-22", "M", "Hattan@mail.com",987),
  (9865, "Rhaf","1997-09-29", "F", "Rahaf@mail.com",654),
  (5487, "Samir","1997-09-23", "M", "samir@mail.com",980),
  (6660, "Riadh","1997-09-15", "M", "riadh@mail.com",432);
```

## إدخال معلومات ٦ مواد كحد أدنى

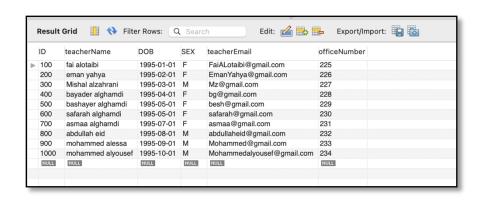
```
1 •
       USE school;
2 •
       INSERT INTO classes
       VALUES(1111, "history"),
3
4
      (1122, "music"),
5
      (1133, "arts"),
6
       (1144, "astronomy"),
7
       (1155, "computer"),
8
       (1166, "physics"),
9
       (1122,"chemistry");
10 •
       SELECT *
11
       FROM classes;
12
```



عرض محتويات جميع الجداول

SELECT \* FROM students;
SELECT \* FROM teachers;
SELECT \* FROM classes;

| id   | studentName           | DOB        | SEX  | startDate  | studentEmail                  | academicLevel | studentTrack | GPA  |  |
|------|-----------------------|------------|------|------------|-------------------------------|---------------|--------------|------|--|
| 1    | Abdurahman bin maneea | 1997-01-01 | M    | 2020-01-01 | Abdurahmanbinmaneea@gmail.com | 1             | Science      | 4    |  |
| 2    | Abdulmajeed maymoni   | 1997-02-01 | M    | 2020-02-01 | abdulmajeedMaymoni@gmail.com  | 2             | Science      | 3.9  |  |
| 3    | Abdurahman sarawq     | 1997-03-01 | M    | 2020-03-01 | Abdurahmansarawq@gmail.com    | 3             | Humanties    | 3.8  |  |
| 4    | Albandry Alqassimi    | 1997-04-01 | F    | 2020-04-01 | AlbandryAlqassimi@gmail.com   | 4             | Science      | 3.7  |  |
| 5    | faisal Alsagry        | 1997-05-01 | M    | 2020-05-01 | FaisalAlsaqry@gmail.com       | 5             | Science      | 3.6  |  |
| 6    | Rahaf Alqahtani       | 1997-06-01 | F    | 2020-06-01 | RahafAlqahtani@gmail.com      | 6             | Humanties    | 3.5  |  |
| 7    | Fatima Alqahtani      | 1997-07-01 | F    | 2020-07-01 | FatimaAlqahtani@gmail.com     | 1             | Science      | 3.4  |  |
| 8    | Riyadh Alghamdi       | 1997-08-01 | M    | 2020-08-01 | RiyadhAlghamdi@gmail.com      | 2             | Science      | 3.3  |  |
| 9    | Samera Alhusaini      | 1997-09-01 | F    | 2020-09-01 | SameraAlhusaini@gmail.com     | 3             | Humanties    | 3.2  |  |
| 10   | Noura Almutairi       | 1997-10-01 | F    | 2020-10-01 | NouraALmutairi@gmail.com      | 4             | Science      | 3.1  |  |
| 11   | Mohammed ALharbi      | 1997-11-01 | M    | 2020-11-01 | MohammedAlharbi@gmail.com     | 5             | Science      | 3    |  |
| 12   | Raneen Zafraani       | 1997-12-01 | F    | 2020-12-01 | Raneenzafraani@gmail.com      | 6             | Humanties    | 4    |  |
| 13   | Younes Alturkey       | 1997-01-02 | M    | 2020-01-02 | younesAlturkey@gmail.com      | 1             | Science      | 3.9  |  |
| 14   | husaain alghamdi      | 1997-01-03 | M    | 2020-01-03 | HusaainAlghamdi@gmail.com     | 2             | Science      | 3.8  |  |
| 15   | yassmin alghamdi      | 1997-01-04 | F    | 2020-01-04 | yassminalghamdi@gmail.com     | 3             | Humanties    | 3.7  |  |
| 16   | abdulaziz alasmri     | 1997-01-05 | M    | 2020-01-05 | abdulazizalasmri@gmail.com    | 4             | Science      | 3.6  |  |
| 17   | Reema Alyousef        | 1997-01-06 | F    | 2020-01-06 | ReemaAlyousef@gmail.com       | 5             | Science      | 3.5  |  |
| 18   | taghreed alqahtani    | 1997-01-07 | F    | 2020-01-07 | Taghredalqahtani@gmail.com    | 6             | Humanties    | 3.4  |  |
| 19   | hassan algaada        | 1997-01-08 | M    | 2020-01-08 | hassanalgaada@gmail.com       | 1             | Science      | 3.3  |  |
| 20   | hanan hakmi           | 1997-01-09 | F    | 2020-01-09 | hananHakmi@gmail.com          | 2             | Science      | 3.2  |  |
| 21   | shahd alshehri        | 1997-01-10 | F    | 2020-01-10 | ShahdAlshehri@gmail.com       | 3             | Humanties    | 3.1  |  |
| 22   | Adel Kalu             | 1997-01-11 | M    | 2020-01-11 | AdelKalu@gmail.com            | 4             | Science      | 3    |  |
| 23   | ibrahim alobaisi      | 1997-01-12 | M    | 2020-01-12 | ibrahimAlobaisi@gmail.com     | 5             | Science      | 4    |  |
| 24   | mansour dardour       | 1997-02-02 | M    | 2020-02-02 | mansourdardour@gmail.com      | 6             | Science      | 3.9  |  |
| 25   | sultan alzoubi        | 1997-03-03 | M    | 2020-03-03 | sultanalzoubi@gmail.com       | 1             | Humanties    | 3.8  |  |
| 26   | amel alagel           | 1997-04-04 | F    | 2020-04-04 | Amelalagel@gmail.com          | 2             | Science      | 3.7  |  |
| 27   | abdulrahman aljaafr   | 1997-05-05 | M    | 2020-05-05 | Abdurahmanaljafaar@gmail.com  | 3             | Science      | 3.6  |  |
| 28   | taif bin eid          | 1997-06-06 | F    | 2020-06-06 | taifbineid@gmail.com          | 4             | Humanties    | 3.5  |  |
| 29   | maryam alraddadi      | 1997-07-07 | F    | 2020-07-07 | MaryamAlraddadi@gmail.com     | 5             | Science      | 3.4  |  |
| 30   | Batool Alghamdi       | 1997-08-08 | F    | 2020-08-08 | batoolalghamdi@gmail.com      | 6             | Science      | 4    |  |
| NULL | NULL                  | NULL       | NULL | NULL       | NULL                          | NULL          | NULL         | NULL |  |



| ID |      | className |
|----|------|-----------|
| •  | 1111 | history   |
|    | 1122 | chemistry |
|    | 1133 | arts      |
|    | 1144 | astronomy |
|    | 1155 | computer  |
|    | 1166 | physics   |
|    | NULL | NULL      |



عرض محتويات جدول الطلاب مع ترتيب الصفوف تصاعديًا حسب اسم الطالب

-- Show the students name in ASC order
SELECT \* FROM students ORDER BY studentName ASC;

| Result | Grid 📋 🛟 Filter Ro    | ows: Q S   | earch |            | Edit: 🚄 📸 Њ Export/Import     | B 60          |              | Ш   |
|--------|-----------------------|------------|-------|------------|-------------------------------|---------------|--------------|-----|
| id     | studentName           | DOB        | SEX   | startDate  | studentEmail                  | academicLevel | studentTrack | GPA |
| 16     | abdulaziz alasmri     | 1997-01-05 | M     | 2020-01-05 | abdulazizalasmri@gmail.com    | 4             | Science      | 3.6 |
| 2      | Abdulmajeed maymoni   | 1997-02-01 | M     | 2020-02-01 | abdulmajeedMaymoni@gmail.com  | 2             | Science      | 3.9 |
| 27     | abdulrahman aljaafr   | 1997-05-05 | M     | 2020-05-05 | Abdurahmanaljafaar@gmail.com  | 3             | Science      | 3.6 |
| 1      | Abdurahman bin maneea | 1997-01-01 | M     | 2020-01-01 | Abdurahmanbinmaneea@gmail.com | 1             | Science      | 4   |
| 3      | Abdurahman sarawq     | 1997-03-01 | M     | 2020-03-01 | Abdurahmansarawq@gmail.com    | 3             | Humanties    | 3.8 |
| 22     | Adel Kalu             | 1997-01-11 | M     | 2020-01-11 | AdelKalu@gmail.com            | 4             | Science      | 3   |
| 4      | Albandry Alqassimi    | 1997-04-01 | F     | 2020-04-01 | AlbandryAlqassimi@gmail.com   | 4             | Science      | 3.7 |
| 26     | amel alagel           | 1997-04-04 | F     | 2020-04-04 | Amelalagel@gmail.com          | 2             | Science      | 3.7 |
| 30     | Batool Alghamdi       | 1997-08-08 | F     | 2020-08-08 | batoolalghamdi@gmail.com      | 6             | Science      | 4   |
| 5      | faisal Alsagry        | 1997-05-01 | M     | 2020-05-01 | FaisalAlsaqry@gmail.com       | 5             | Science      | 3.6 |
| 7      | Fatima Algahtani      | 1997-07-01 | F     | 2020-07-01 | FatimaAlqahtani@gmail.com     | 1             | Science      | 3.4 |
| 20     | hanan hakmi           | 1997-01-09 | F     | 2020-01-09 | hananHakmi@gmail.com          | 2             | Science      | 3.2 |
| 19     | hassan algaada        | 1997-01-08 | M     | 2020-01-08 | hassanalgaada@gmail.com       | 1             | Science      | 3.3 |
| 14     | husaain alghamdi      | 1997-01-03 | M     | 2020-01-03 | HusaainAlghamdi@gmail.com     | 2             | Science      | 3.8 |
| 23     | ibrahim alobaisi      | 1997-01-12 | M     | 2020-01-12 | ibrahimAlobaisi@gmail.com     | 5             | Science      | 4   |
| 24     | mansour dardour       | 1997-02-02 | M     | 2020-02-02 | mansourdardour@gmail.com      | 6             | Science      | 3.9 |
| 29     | maryam alraddadi      | 1997-07-07 | F     | 2020-07-07 | MaryamAlraddadi@gmail.com     | 5             | Science      | 3.4 |
| 11     | Mohammed ALharbi      | 1997-11-01 | M     | 2020-11-01 | MohammedAlharbi@gmail.com     | 5             | Science      | 3   |
| 10     | Noura Almutairi       | 1997-10-01 | F     | 2020-10-01 | NouraALmutairi@gmail.com      | 4             | Science      | 3.1 |
| 6      | Rahaf Alqahtani       | 1997-06-01 | F     | 2020-06-01 | RahafAlqahtani@gmail.com      | 6             | Humanties    | 3.5 |
| 12     | Raneen Zafraani       | 1997-12-01 | F     | 2020-12-01 | Raneenzafraani@gmail.com      | 6             | Humanties    | 4   |
| 17     | Reema Alyousef        | 1997-01-06 | F     | 2020-01-06 | ReemaAlyousef@gmail.com       | 5             | Science      | 3.5 |
| 8      | Riyadh Alghamdi       | 1997-08-01 | M     | 2020-08-01 | RiyadhAlghamdi@gmail.com      | 2             | Science      | 3.3 |
| 9      | Samera Alhusaini      | 1997-09-01 | F     | 2020-09-01 | SameraAlhusaini@gmail.com     | 3             | Humanties    | 3.2 |
| 21     | shahd alshehri        | 1997-01-10 | F     | 2020-01-10 | ShahdAlshehri@gmail.com       | 3             | Humanties    | 3.1 |
| 25     | sultan alzoubi        | 1997-03-03 | M     | 2020-03-03 | sultanalzoubi@gmail.com       | 1             | Humanties    | 3.8 |
| 18     | taghreed alqahtani    | 1997-01-07 | F     | 2020-01-07 | Taghredalqahtani@gmail.com    | 6             | Humanties    | 3.4 |
| 28     | taif bin eid          | 1997-06-06 | F     | 2020-06-06 | taifbineid@gmail.com          | 4             | Humanties    | 3.5 |
| 15     | yassmin alghamdi      | 1997-01-04 | F     | 2020-01-04 | yassminalghamdi@gmail.com     | 3             | Humanties    | 3.7 |
| 13     | Younes Alturkey       | 1997-01-02 | M     | 2020-01-02 | younesAlturkey@gmail.com      | 1             | Science      | 3.9 |
| MULL   | NULL                  | MULL       | MULL  | MULL       | HULL                          | PROFILE       | NULL         | NU. |



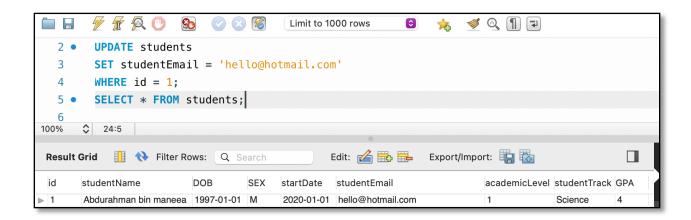
عرض محتويات جدول الطلاب مع إعطاء اسم مستعار لحقل "اسم الطالب" لاختصار اسم العمود أو جعله ذات معنى

## SELECT studentName As Ename FROM students;

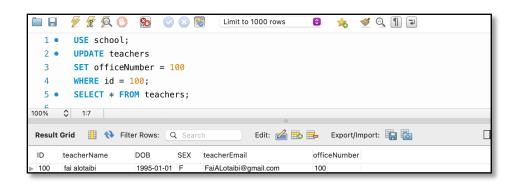
|   | Ename                 |
|---|-----------------------|
| ⊳ | Abdurahman bin maneea |
|   | Abdulmajeed maymoni   |
|   | Abdurahman sarawq     |
|   | Albandry Alqassimi    |
|   | faisal Alsaqry        |
|   | Rahaf Alqahtani       |
|   | Fatima Alqahtani      |
|   | Riyadh Alghamdi       |
|   | Samera Alhusaini      |
|   | Noura Almutairi       |
|   | Mohammed ALharbi      |
|   | Raneen Zafraani       |
|   | Younes Alturkey       |
|   | husaain alghamdi      |
|   | yassmin alghamdi      |
|   | abdulaziz alasmri     |
|   | Reema Alyousef        |
|   | taghreed alqahtani    |
|   | hassan algaada        |
|   | hanan hakmi           |
|   | shahd alshehri        |
|   | Adel Kalu             |
|   | ibrahim alobaisi      |
|   | mansour dardour       |
|   | sultan alzoubi        |
|   | amel alagel           |
|   | abdulrahman aljaafr   |
|   | taif bin eid          |
|   |                       |



التعديل على بيانات احد الطلاب وتغيير البريد الالكتروني للطالب



التعديل على بيانات احد المعلمين وتغيير رقم المكتب الخاص به





تعديل اسم احد الجداول

