

عنوان المشروع: SQL 2

اسم المتدربة: البندري القصيمي

اسم المجموعة: القدية

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وصف المشروع: مشروع تابع لقاعدة بيانات مدرسة التميز الثانوية

- إنشاء جدول للطلاب المتفوقين من جدول الطلاب، بحيث يحتوي هذا الجدول على بيانات الطلاب الذي يكون معدلهم التراكمي أعلى من 90.

The screenshot shows the MySQL Workbench interface. The 'Query' window contains the following SQL code:

```

1  -- students GPA greater than 90
2  use Altamayoz_secondary_school;
3  create table Excelling
4  select * from students where GPA > 90;
5  select * from Excelling ;

```

The 'Result Grid' shows the data for the 'Excelling' table, which is currently empty. The 'Output' window shows the execution results:

#	Time	Action	Message	Duration / Fetch
14	10:41:30	use Altamayoz_secondary_school	0 row(s) affected	0.000 sec
15	10:41:30	create table Excelling select * from students where GPA > 90	19 row(s) affected Records: 19 Duplicates: 0 Warnings: 0	0.047 sec
16	10:41:30	select * from Excelling LIMIT 0, 1000	19 row(s) returned	0.000 sec / 0.000 sec

- إنشاء جدول للطلاب الغير مجتازين من جدول الطلاب، بحيث يحتوي هذا الجدول على بيانات الطلاب الذي يكون معدلهم التراكمي أقل من 60.

The screenshot shows the MySQL Workbench interface. The 'Query' window contains the following SQL code:

```

1  -- students GPA less than 60
2  use Altamayoz_secondary_school;
3  create table not_passed
4  select * from students where GPA < 60;
5  select * from not_passed;

```

The 'Result Grid' shows the data for the 'not_passed' table, which is currently empty. The 'Output' window shows the execution results:

#	Time	Action	Message	Duration / Fetch
17	10:44:14	use Altamayoz_secondary_school	0 row(s) affected	0.000 sec
18	10:44:14	create table not_passed select * from students where GPA < 60	4 row(s) affected Records: 4 Duplicates: 0 Warnings: 0	0.015 sec
19	10:44:14	select * from not_passed LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec

- عرض أسماء الطلاب التي تبدأ بحرف A.

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL code:

```
-- students names start with A letter
use Altamayoz_secondary_school;
select * from students where student_name like "a%";
```

The result grid displays the following data:

student_id	student_name	student_DOB	student_gender	student_DOJ	student_email	student_level	student_major	GPA
1	Ahmed	1997-01-02	M	2012-02-01	ahmed@gmail.com	2	scientific	85.9
5	Abandry	1997-05-02	F	2012-03-01	Abandry@gmail.com	5	Humanitarian	97.9
9	Amjad	1997-05-02	F	2012-03-01	Amjad@gmail.com	2	scientific	89.9
13	Abdulsaz	1997-05-02	M	2012-03-01	Abdulsaz@gmail.com	4	Humanitarian	99.4
25	Abnar	1998-05-02	F	2012-03-01	Abnar25@gmail.com	6	scientific	89.9
30	Abdullah	1997-05-02	M	2012-03-01	Abdullah@gmail.com	1	Humanitarian	100

The output pane shows the execution log:

#	Time	Action	Message	Duration / Fetch
19	10:44:14	select "from not_passed LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec
20	10:46:02	use Altamayoz_secondary_school	0 row(s) affected	0.000 sec
21	10:46:02	select "from students where student_name like "a%" LIMIT 0, 1000	6 row(s) returned	0.000 sec / 0.000 sec

- عرض أسماء الطلاب التي تحتوي أسمائهم على أربع خانات.

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL code:

```
-- students names of 4 letters
use Altamayoz_secondary_school;
select * from students where student_name like "____";
```

The result grid displays the following data:

student_id	student_name	student_DOB	student_gender	student_DOJ	student_email	student_level	student_major	GPA
2	Sami	1997-05-02	M	2012-03-01	Sami@gmail.com	4	Humanitarian	99.9
8	Hala	2005-05-02	F	2012-03-01	Hala@gmail.com	4	scientific	79.9
10	Saud	2004-05-02	M	2012-03-01	Saud@gmail.com	2	Humanitarian	97.9
14	Haya	1997-05-02	F	2012-03-01	Haya@gmail.com	4	scientific	99.3
17	Joud	1997-05-02	F	2012-03-01	Joud@gmail.com	4	Humanitarian	100

The output pane shows the execution log:

#	Time	Action	Message	Duration / Fetch
21	10:45:02	select "from students where student_name like "a%" LIMIT 0, 1000	6 row(s) returned	0.000 sec / 0.000 sec
22	10:46:48	use Altamayoz_secondary_school	0 row(s) affected	0.000 sec
23	10:46:48	select "from students where student_name like "____" LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec

- تطبيق (Aggregate functions) AVG, MAX, MIN) على المعدل التراكمي للطلاب مع إضافة تسمية واضحة للنتائج.

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'altamayoz_secondary_school' database with tables 'courses', 'students', and 'teachers'. The main query editor contains the following SQL code:

```

1 -- students Average GPA
2 use Altamayoz_secondary_school;
3
4 select avg(GPA) As Average_GPA from students ;

```

The 'Result Grid' shows the output of the query:

Average_GPA
89.760000000000003

The 'Action Output' pane at the bottom shows the execution log:

#	Time	Action	Message	Duration / Fetch
25	10:49:29	select avg(GPA) from students LIMIT 0, 1000	1 row(s) returned	0.047 sec / 0.000 sec
26	10:50:31	use Altamayoz_secondary_school	0 row(s) affected	0.000 sec
27	10:50:31	select avg(GPA) As Average_GPA from students LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'altamayoz_secondary_school' database with tables 'courses', 'students', and 'teachers'. The main query editor contains the following SQL code:

```

1 -- students Maximum GPA
2 use Altamayoz_secondary_school;
3
4 select max(GPA) As Maximum_GPA from students ;

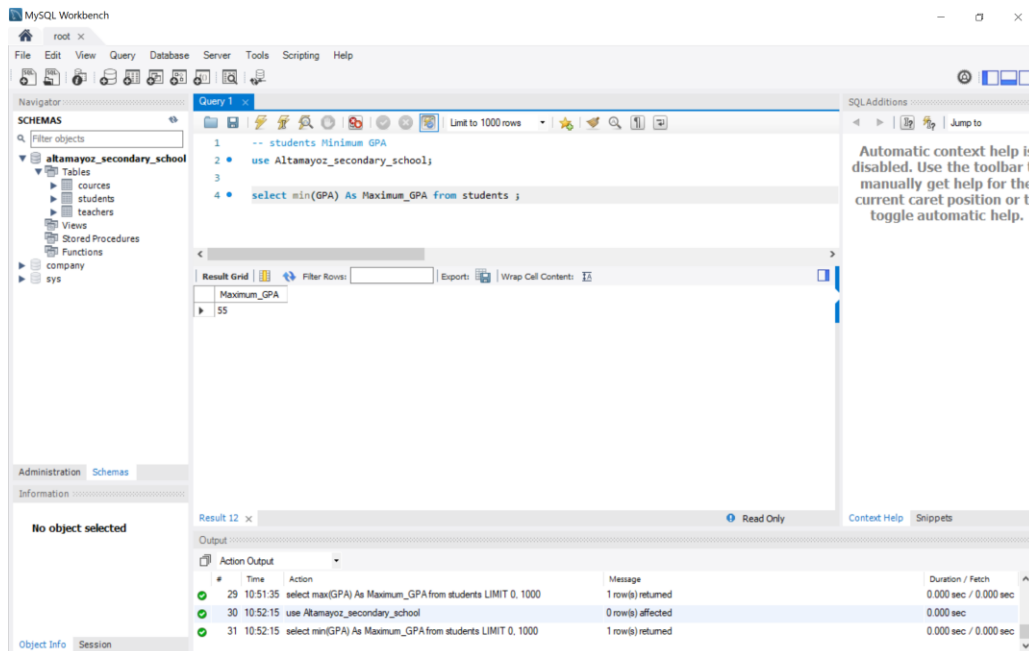
```

The 'Result Grid' shows the output of the query:

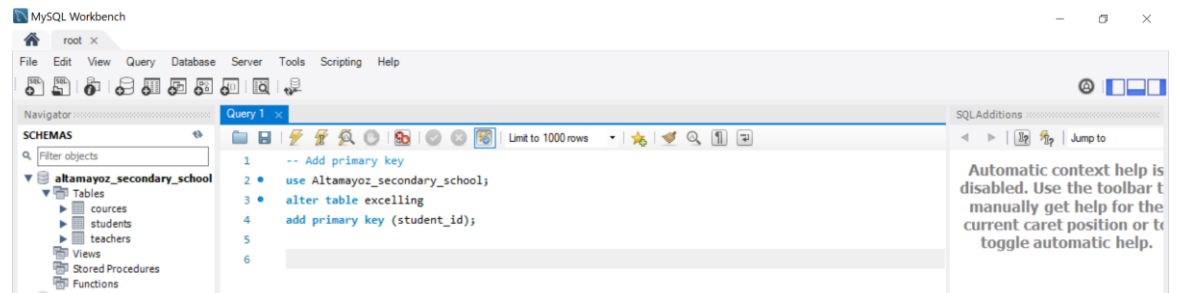
Maximum_GPA
100

The 'Action Output' pane at the bottom shows the execution log:

#	Time	Action	Message	Duration / Fetch
27	10:50:31	select avg(GPA) As Average_GPA from students LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
28	10:51:35	use Altamayoz_secondary_school	0 row(s) affected	0.000 sec
29	10:51:35	select max(GPA) As Maximum_GPA from students LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec



- إضافة Primary key لجدول الطلاب المتفوقين



- حصر وعرض أسماء الطلاب المتفوقين في المستوى السادس الحاصلين على معدل تراكمي يساوي 100.

The screenshot shows the MySQL Workbench interface. The 'Query 1' editor contains the following SQL code:

```
-- Add primary key
use Altamayoz_secondary_school;

select * from excelling where GPA = 100 and student_level = 6
```

The 'Result Grid' displays the following data:

student_id	student_name	student_DOB	student_gender	student_DOJ	student_email	student_level	student_major	GPA
26	Fai	1997-02-02	F	2012-03-01	Fai@gmail.com	6	scientific	100

The 'Action Output' pane shows the execution results:

#	Time	Action	Message	Duration / Fetch
43	10:59:58	select * from excelling where GPA = 100 LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec
44	11:00:36	use Altamayoz_secondary_school;	0 row(s) affected	0.000 sec
45	11:00:36	select * from excelling where GPA = 100 and student_level = 6 LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

- عرض الطلاب اللذين في المستوى الأول وأعمارهم بين ١٥ و ١٦ سنة.

The screenshot shows the MySQL Workbench interface. The 'Query 1' editor contains the following SQL code:

```
-- Studente between age 15 and 16 in level 1
use Altamayoz_secondary_school;

select * from students where student_DOB between "2005-01-01" and "2006-01-01" and student_level = 1
```

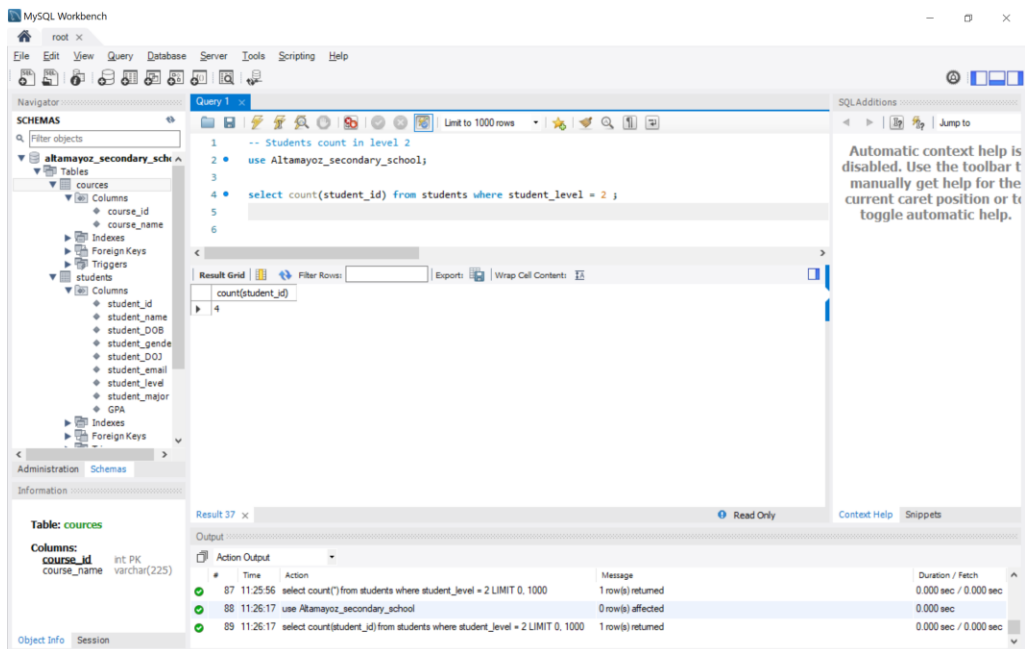
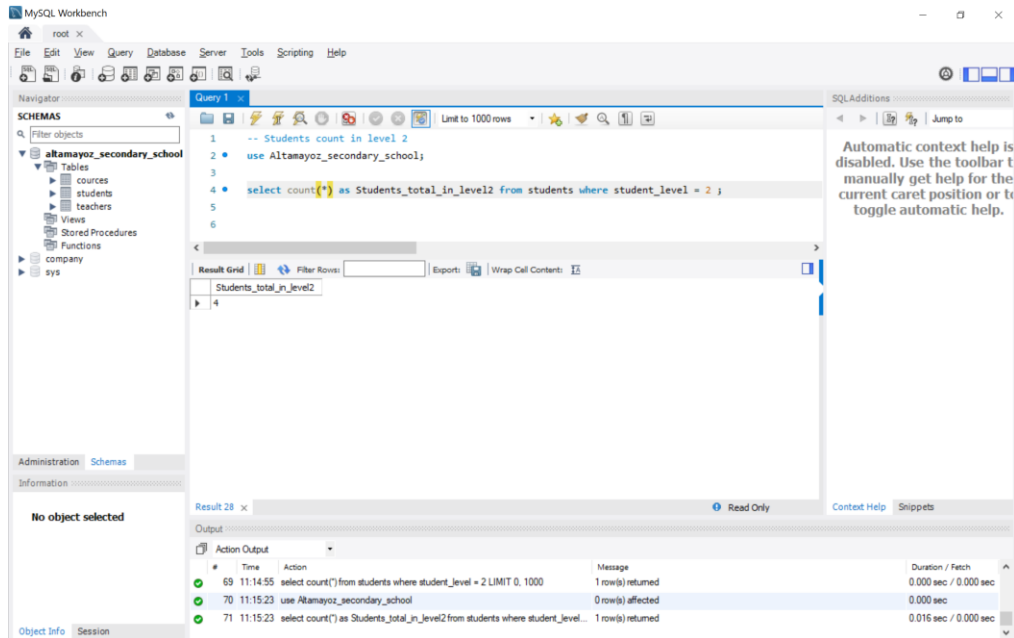
The 'Result Grid' displays the following data:

student_id	student_name	student_DOB	student_gender	student_DOJ	student_email	student_level	student_major	GPA
30	Abdullah	2005-05-02	M	2012-03-01	Abdullah@gmail.com	1	Humanitarian	100

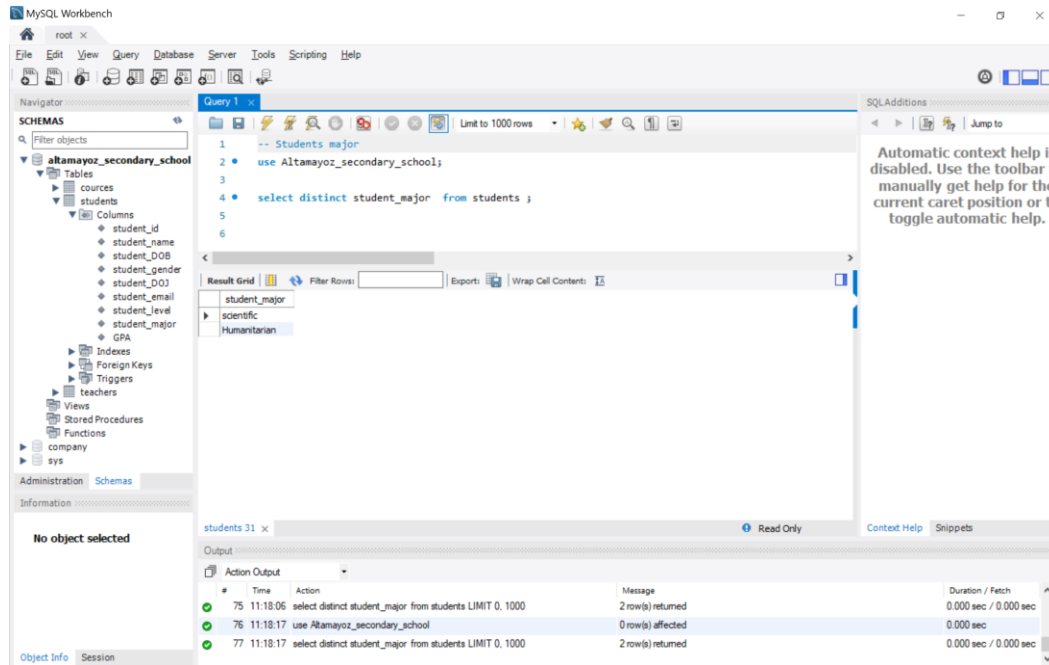
The 'Action Output' pane shows the execution results:

#	Time	Action	Message	Duration / Fetch
63	11:10:59	select * from students where student_DOB between "2005-01-01" and "2006-01-01" and student_level = 1 LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec
64	11:11:41	use Altamayoz_secondary_school;	0 row(s) affected	0.000 sec
65	11:11:41	select * from students where student_DOB between "2005-01-01" and "2006-01-01" and student_level = 1 LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

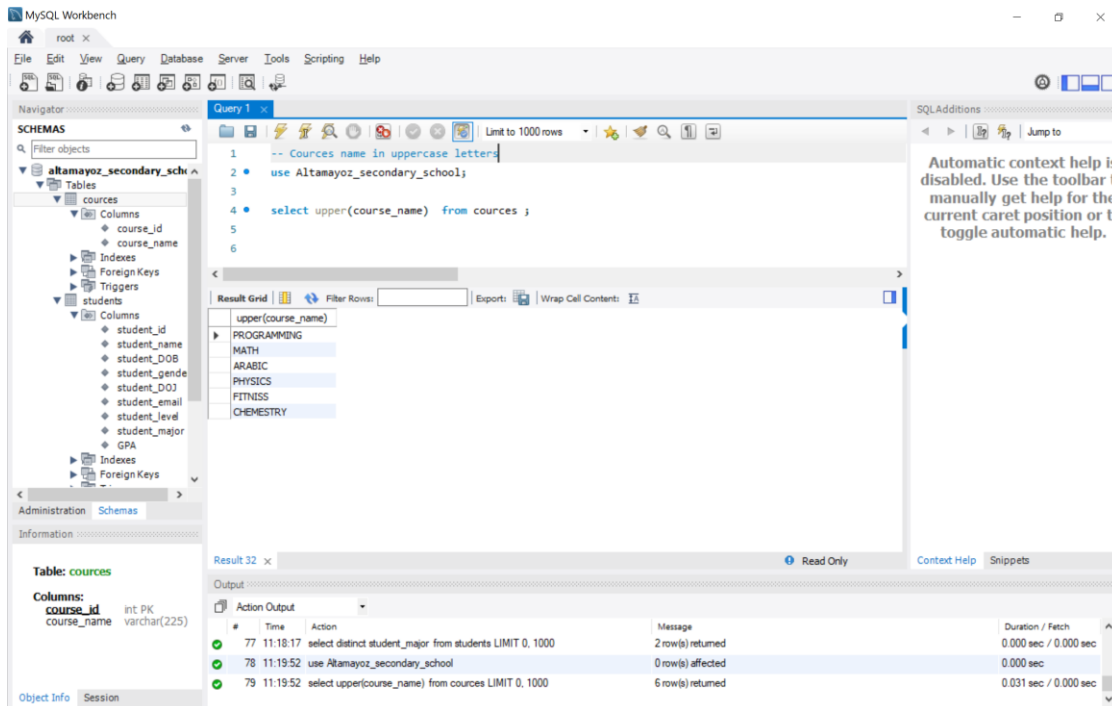
- عرض عدد الطلاب الموجودين بالمستوى ٢.



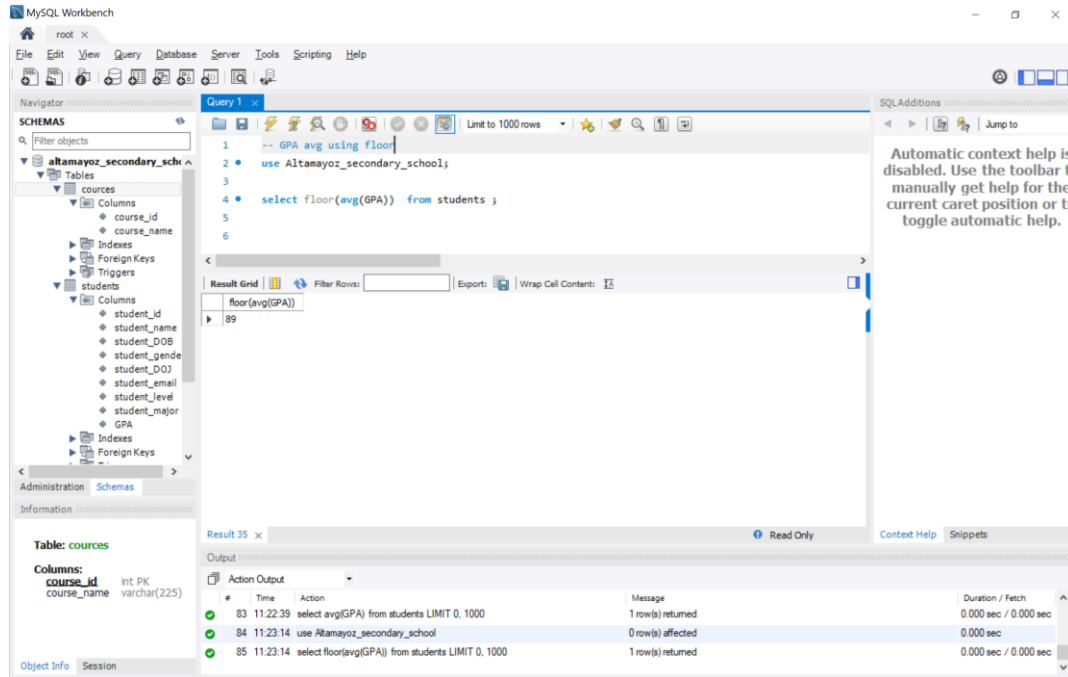
- استعراض مسارات الطلاب في المدرسة بدون تكرار.



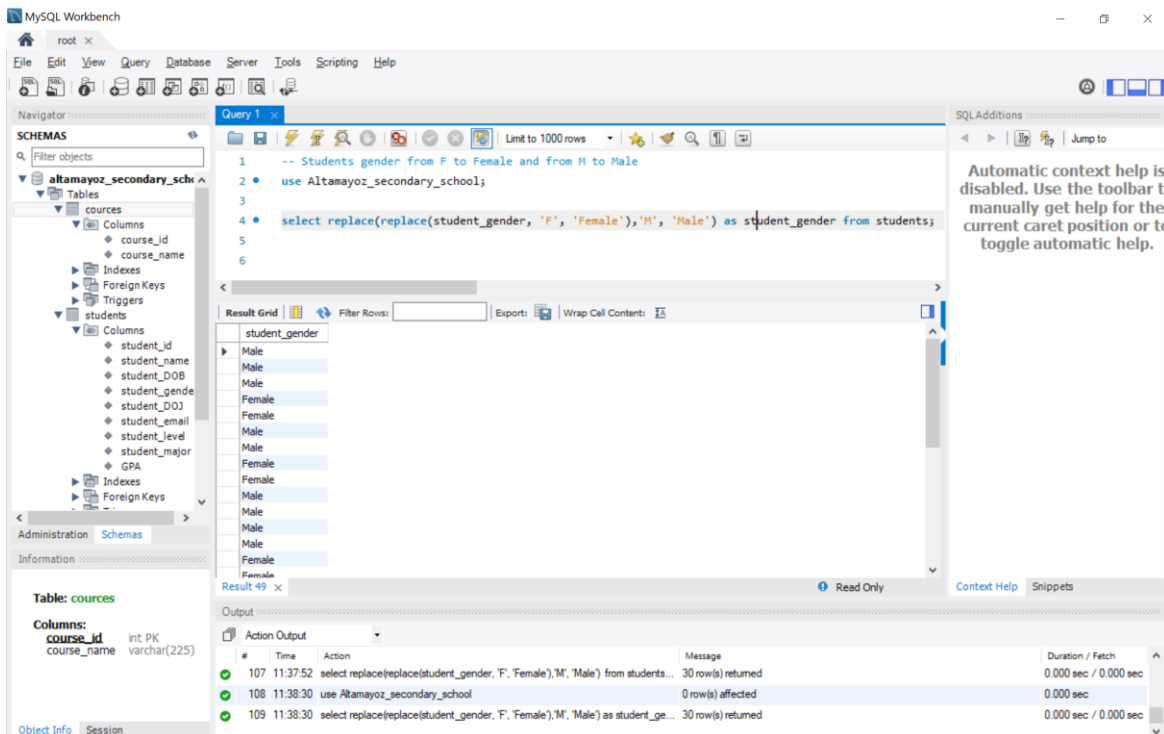
- عرض أسماء المواد ويتم عرض الكلمات بالأحرف الكبيرة.

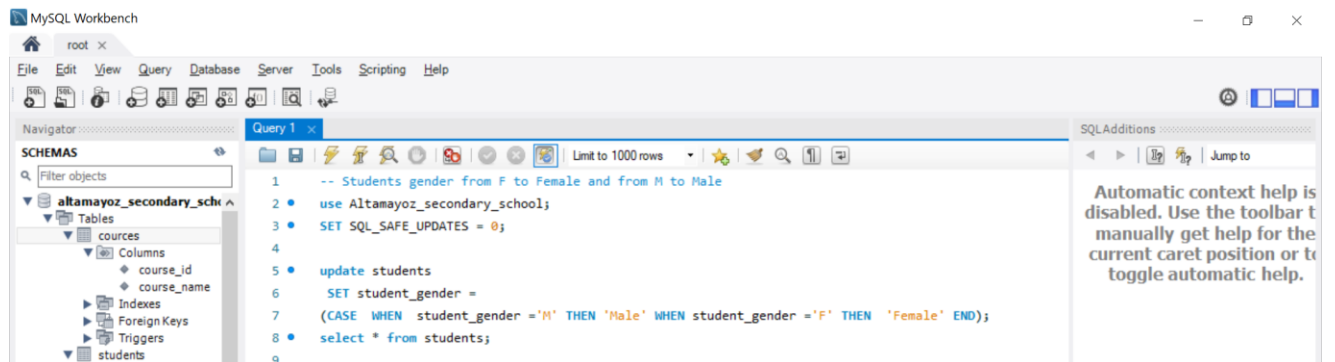
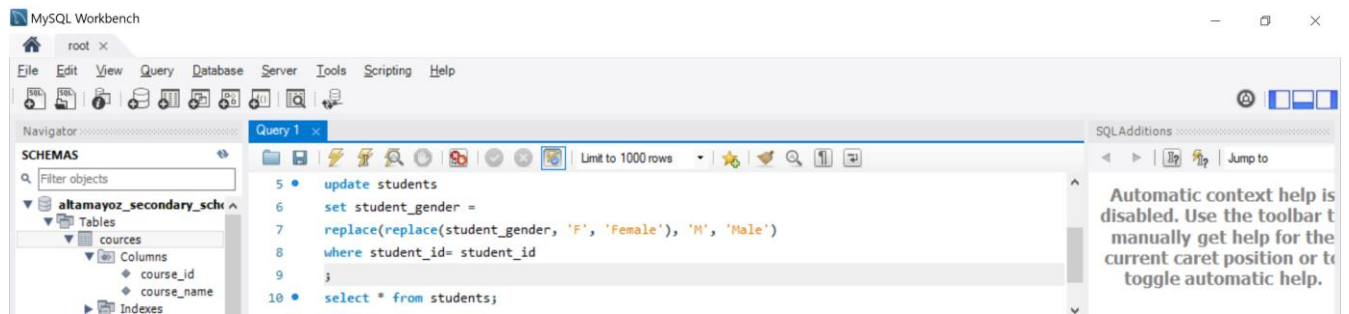


- عرض المتوسط الحسابي للمعدل التراكمي وقرب الرقم لأقرب أصغر عدد) باستخدام (numeric functions).



- تبديل جميع الصفوف من جدول الطلاب التي تحتوي على الجنس F إلى Female ، و M إلى Male باستخدام (string functions).





- تحديث المعدل التراكمي للطلاب الذي معدلهم التراكمي أقل من ٦٠ وزيادة معدلهم بخمس درجات.

