



عنوان المشروع: FINAL SQL PROJECT

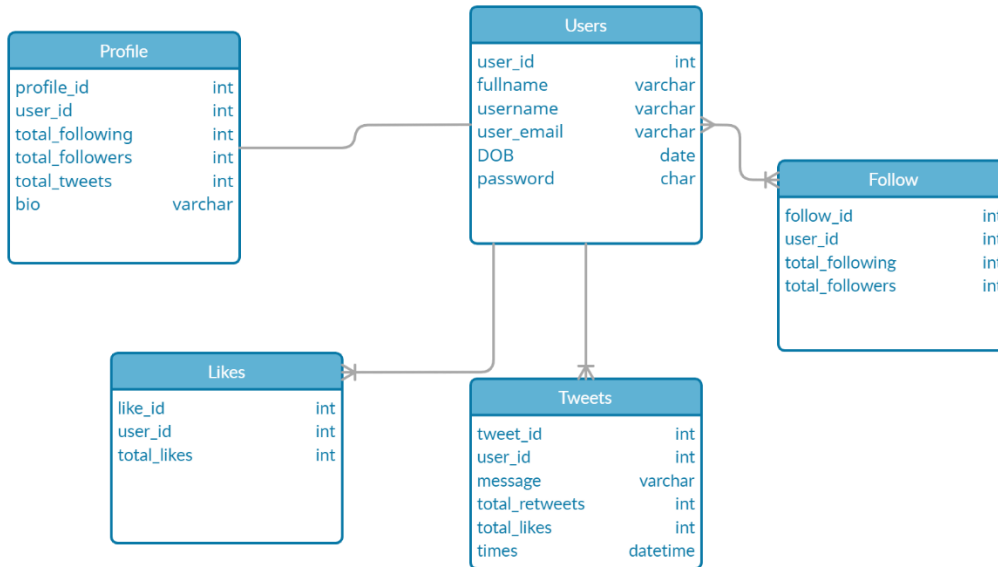
اسم المتدربة: البندري القصيمي

اسم المجموعة: القدية

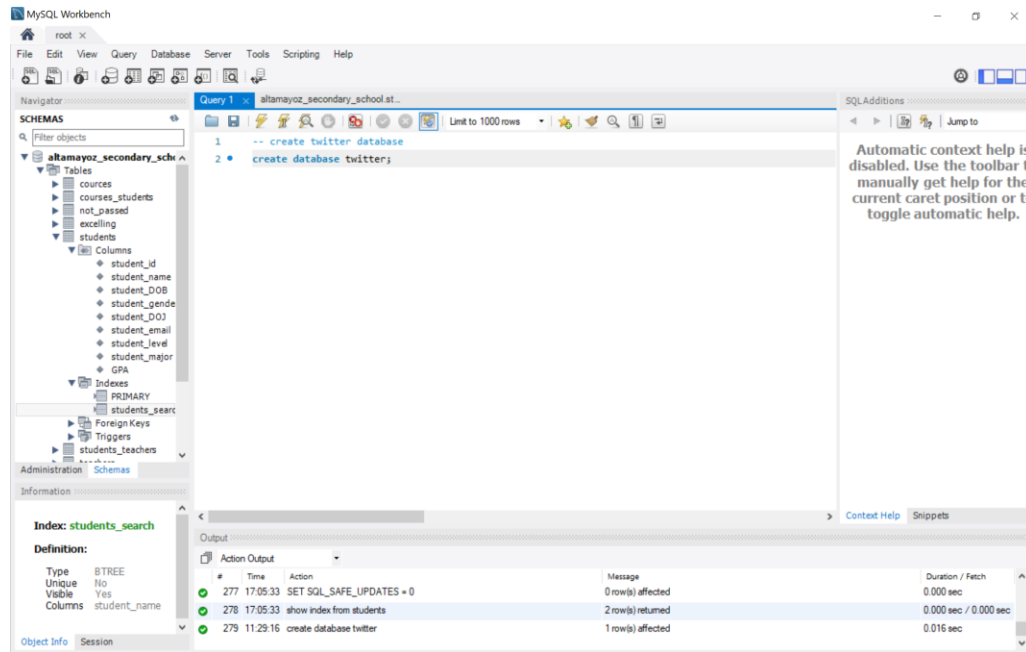
اسم المشرفة: نوره عبدالله

وصف المشروع: انشاء قاعدة بيانات للتويتيمع استخدام ERD لتوضيح العلاقات

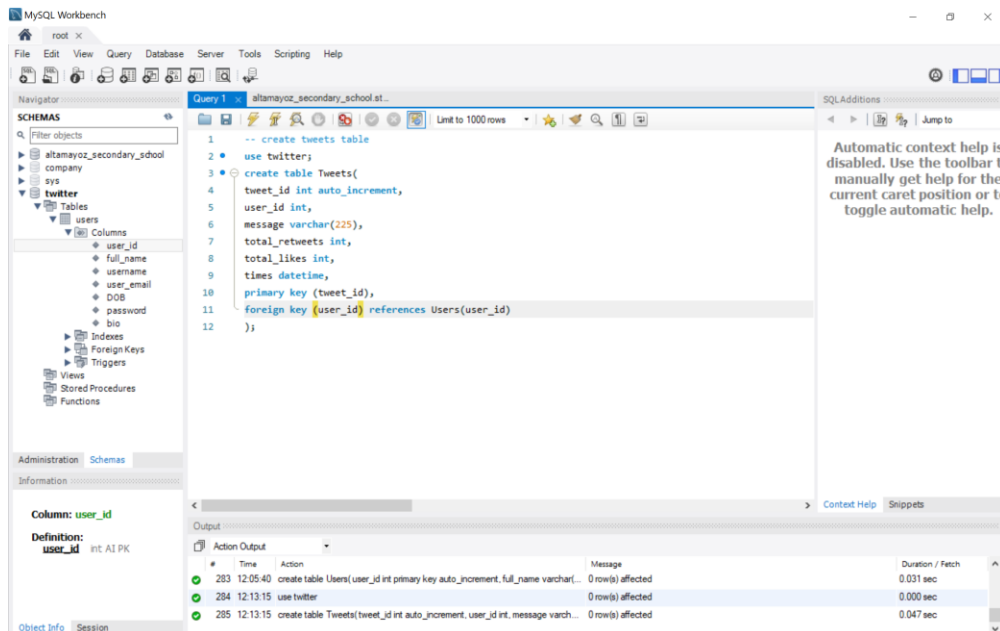
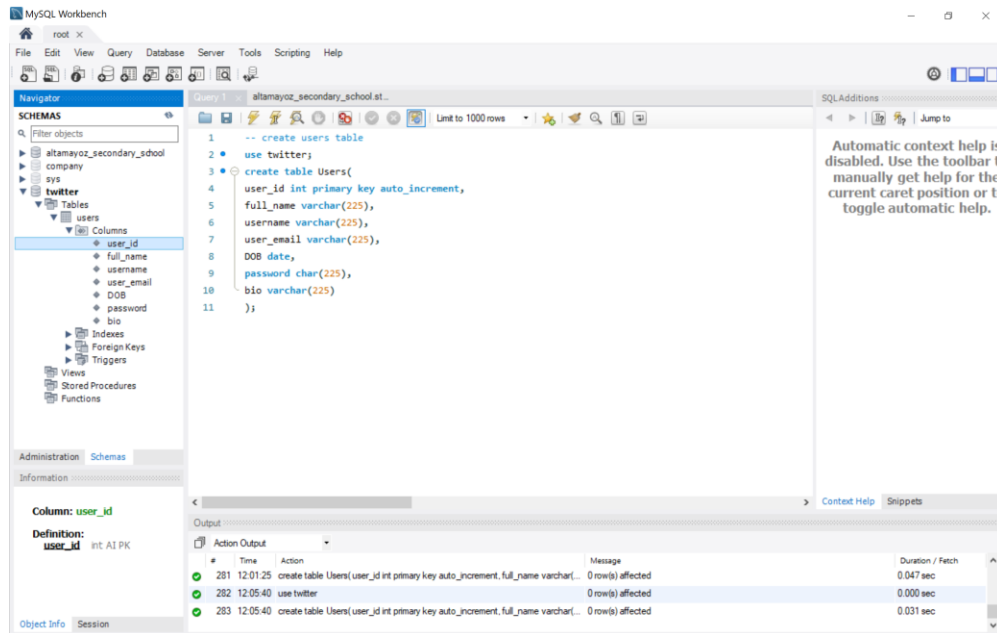
- قبل التطبيق على SQL قم باستنتاج العلاقات والأعمدة ورسمها بواسطة ER diagram ثم قم بالتطبيق.
- ارفاق ER diagram



- انشاء قاعدة البيانات



- انشاء الجداول المطلوبة مع العلاقات
- عند استنتاج العلاقات تأكد من تطبيقها بين الجداول (إضافة foreign key).



The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with 'altamayo2_secondary_school' selected. The central query editor contains SQL code to create a 'Profile' table. The right sidebar shows a message about automatic context help. The bottom output panel displays the execution results of the queries.

Query 1: altamayo2_secondary_school at...

```
1 -- create profile table
2 use twitter;
3 create table Profile(
4   profile_id int auto_increment,
5   user_id int,
6   total_following int,
7   total_followers int,
8   total_tweets int,
9   primary key (profile_id),
10  foreign key (user_id) references Users(user_id)
11 );
```

Column: user_id
Definition: user_id int AI PK

Output:

#	Time	Action	Message	Duration / Fetch
285	12:13:15	create table Tweets(tweet_id int auto_increment, user_id int, message varchar...	0 row(s) affected	0.047 sec
286	12:22:05	use twitter	0 row(s) affected	0.000 sec
287	12:22:05	create table Profile(profile_id int auto_increment, user_id int, total_following int...	0 row(s) affected	0.047 sec

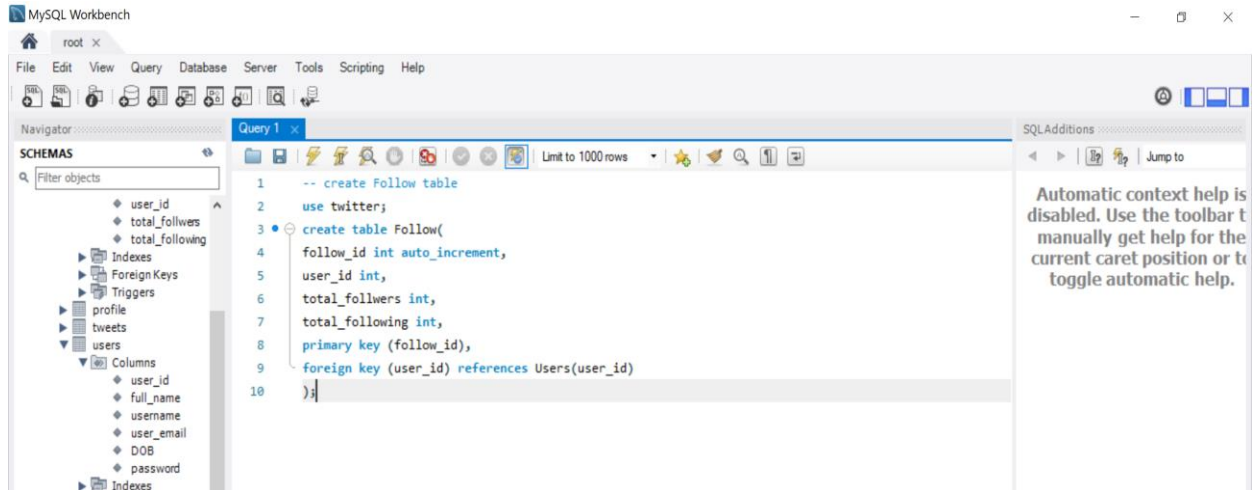
The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with 'altamayo2_secondary_school' selected. The central query editor contains SQL code to create a 'Likes' table and a procedure. The right sidebar shows a message about automatic context help. The bottom output panel displays the execution results of the queries.

Query 1:

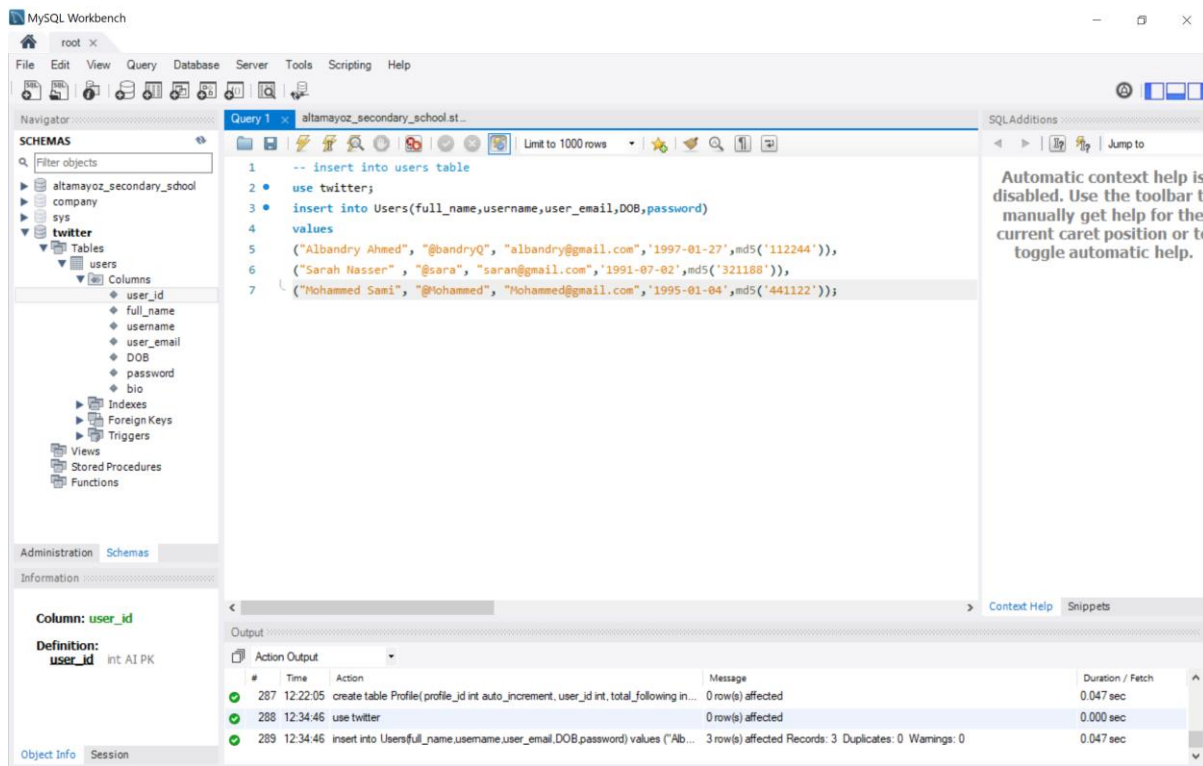
```
1 -- create Likes table
2 use twitter;
3 create table likes(
4   like_id int auto_increment,
5   user_id int,
6   total_likes int,
7   primary key (like_id),
8   foreign key (user_id) references Users(user_id)
9 );
```

Output:

#	Time	Action	Message	Duration / Fetch
142	23:55:18	create procedure User_Follow() begin select full_name, users.user_id, Follow...	3 row(s) returned	- / 0.000 sec
143	00:13:37	use twitter	0 row(s) affected	0.000 sec
144	00:13:37	create table likes(like_id int auto_increment, user_id int, total_likes int, primary...	0 row(s) affected	0.031 sec



- تعبئة الجداول بالبيانات وعرضها
 - تشفير الرقم السري للمستخدم
 - عند إضافة أي عمود رقم تسلسلي يجب ان يتم تعبئته تلقائياً.



MySQL Workbench

root x

File Edit View Query Database Server Tools Scripting Help

Navigator

altamayoz_secondary_school.st...

Query 1 x altamayoz_secondary_school.st...

Limit to 1000 rows

```

1 -- show users table
2 use twitter;
3 select * from users;

```

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result Grid

user_id	full_name	username	user_email	DOB	password
1	Albandry Ahmed	@bandryQ	albandry@gmail.com	1997-01-27	955f8ebd6c18b6e13d7dc3b66b3153c
2	Sarah Nasser	@sara	saran@gmail.com	1991-07-02	98ae41e9d98c5a140c75c999ed48031b
3	Mohammed Sani	@Mohammed	Mohammed@gmail.com	1995-01-04	5530f8ab01cf9a9e76c9c8d1d4dd2c35

users 85 x

Column: user_id

Definition: user_id int AI PK

Object Info Session

Output

Action Output

#	Time	Action	Message	Duration / Fetch
293	12:38:27	alter table users drop column bio	3 row(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.063 sec
294	12:38:35	use twitter	0 row(s) affected	0.000 sec
295	12:38:35	select * from users LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec

MySQL Workbench

root x

File Edit View Query Database Server Tools Scripting Help

Navigator

altamayoz_secondary_school.st...

Query 1 x altamayoz_secondary_school.st...

Limit to 1000 rows

```

1 -- insert into profile table
2 use twitter;
3 insert into Profile(user_id,total_following, total_followers, total_tweets, bio)
4 values(1,400, 1000, 8000,"85 students, Photographer and Dreamer"),
5 (2,606, 500, 5400,"Always Ambitious"),
6 (3,250, 900, 3700,"Master degree in Data Science");
7

```

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Output

Action Output

#	Time	Action	Message	Duration / Fetch
300	12:42:27	select * from Profile LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
301	12:47:36	use twitter	0 row(s) affected	0.000 sec
302	12:47:36	insert into Profile(user_id,total_following, total_followers, total_tweets, bio) val...	3 row(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.000 sec

MySQL Workbench

root x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHMAS

Filter objects

altamayoz_secondary_school

company

sys

twitter

Tables

users

Columns

user_id

full_name

username

user_email

DOB

password

bio

Indexes

Foreign Keys

Views

Stored Procedures

Functions

Administration Schemas

Information

Column: user_id

Definition: user_id int AI PK

Object Info Session

Query 1 x altamayoz_secondary_school st...

Limit to 1000 rows

```

1 -- show profile table
2 use twitter;
3 select * from Profile;

```

Result Grid

profile_id	user_id	total_following	total_followers	total_tweets	bio
1	1	400	1000	8000	BS students, Photographer and Dreamer
2	2	606	500	5400	Always Ambitious
3	3	250	900	3700	Master degree in Data Science
NULL	NULL	NULL	NULL	NULL	NULL

Profile 87 x

Apply

Context Help Snippets

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Output

Action Output

#	Time	Action	Message	Duration / Fetch
302	12:47:36	insert into Profile(user_id,total_following,total_followers,total_tweets,bio) val...	3 row(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.000 sec
303	12:48:36	use twitter	0 row(s) affected	0.000 sec
304	12:48:36	select * from Profile LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec

MySQL Workbench

root x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHMAS

Filter objects

altamayoz_secondary_school

company

sys

twitter

Tables

users

Columns

user_id

full_name

username

user_email

DOB

password

bio

Indexes

Foreign Keys

Views

Stored Procedures

Functions

Administration Schemas

Information

Column: user_id

Definition: user_id int AI PK

Object Info Session

Query 1 x altamayoz_secondary_school st...

Limit to 1000 rows

```

1 -- insert into tweet table
2 use twitter;
3 insert into tweets(user_id,message,total_retweets,total_likes,times)
4 values(1, "Good Morning!", 10, 5, '2021-01-01 08:00:01'),
5 (2, "Hello everyone, what's new?!", 5, 7, '2020-01-01 03:00:01'),
6 (3, "Congratulations! Finally I graduated..", 100, 46, '2021-05-01 04:12:00');

```

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
304	12:48:36	select * from Profile LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec
305	12:55:28	use twitter	0 row(s) affected	0.000 sec
306	12:55:28	insert into tweets(user_id,message,total_retweets,total_likes,times) values(1...	3 row(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.032 sec

MySQL Workbench

root x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- user_id
- total_followers
- total_following
- Indexes
- Foreign Keys
- Triggers
- profile
- tweets
- users
 - Columns
 - user_id
 - full_name
 - username
 - user_email
 - DOB
 - password
 - Indexes
 - Foreign Keys
 - Triggers
- Views
- Stored Procedures
- createAccount
- Functions

Administration Schemas

Information

No object selected

Object Info Session

Query 1

```
-- create Likes table
use twitter;

insert into likes(user_id, total_likes)
values(1,5), (2,7),(3,46);

select * from likes;
```

Result Grid

like_id	user_id	total_likes
1	1	5
2	2	7
3	3	46

likes 34 likes 36 x

Apply Revert Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
153	00:22:53	use twitter	0 row(s) affected	0.000 sec
154	00:22:53	insert into likes(user_id, total_likes) values(1,5), (2,7),(3,46)	3 row(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.000 sec
155	00:22:53	select * from likes LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

MySQL Workbench

root x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- altamayoz_secondary_school
- company
- sys
- twitter
 - Tables
 - profile
 - tweets
 - users
 - Views
 - Stored Procedures
 - createAccount
 - User_Follow
 - Functions

Administration Schemas

Information

No object selected

Object Info Session

Query 1

```
-- create Follow table
use twitter;

insert into Follow(user_id, total_followers, total_following)
values(1, 400,1000),(2, 600,500),(3, 250,900);
```

Result Grid

likes 34 likes 36 x

Apply Revert Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
4	23:20:46	insert into Follow(user_id, total_followers, total_following) values(1, 400,1000),(1,...	3 row(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.047 sec
5	23:21:02	use twitter	0 row(s) affected	0.000 sec
6	23:21:02	insert into Follow(user_id, total_followers, total_following) values(1, 400,1000),(2,...	3 row(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.000 sec

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with 'altamayoz_secondary_school' selected. The main query window shows the following SQL code:

```

1 -- show tweet table
2 use twitter;
3 select * from tweets;

```

The 'Result Grid' shows the following data:

tweet_id	user_id	message	total_retweets	total_likes	times
1	1	Good Morning!	10	5	2021-01-01 08:00:01
2	2	Hello everyone, what's new?!	5	7	2020-01-01 03:00:01
3	3	Congratulations! Finally I graduated..	100	46	2021-05-01 04:12:00

The 'Output' tab shows the execution log:

#	Time	Action	Message	Duration / Fetch
306	12:55:28	insert into tweets(user_id, message, total_retweets, total_likes, times) values(1, 'Good Morning!', 10, 5, '2021-01-01 08:00:01')	3 row(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.032 sec
307	12:56:25	use twitter	0 row(s) affected	0.000 sec
308	12:56:29	select * from tweets LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec

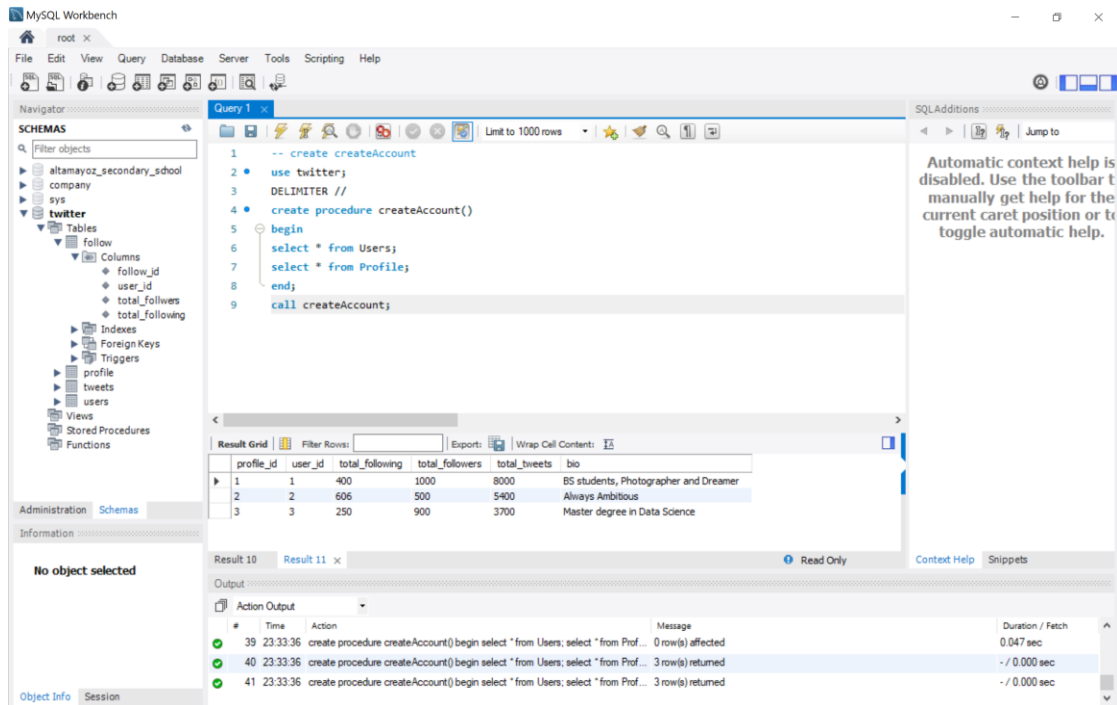
- قم بإنشاء Procedure باسم createAccount سوف نمرر لها بيانات المستخدم و الملف الشخصي ويتم إضافتها لكل الجدولين.

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with 'altamayoz_secondary_school' selected. The main query window shows the following SQL code:

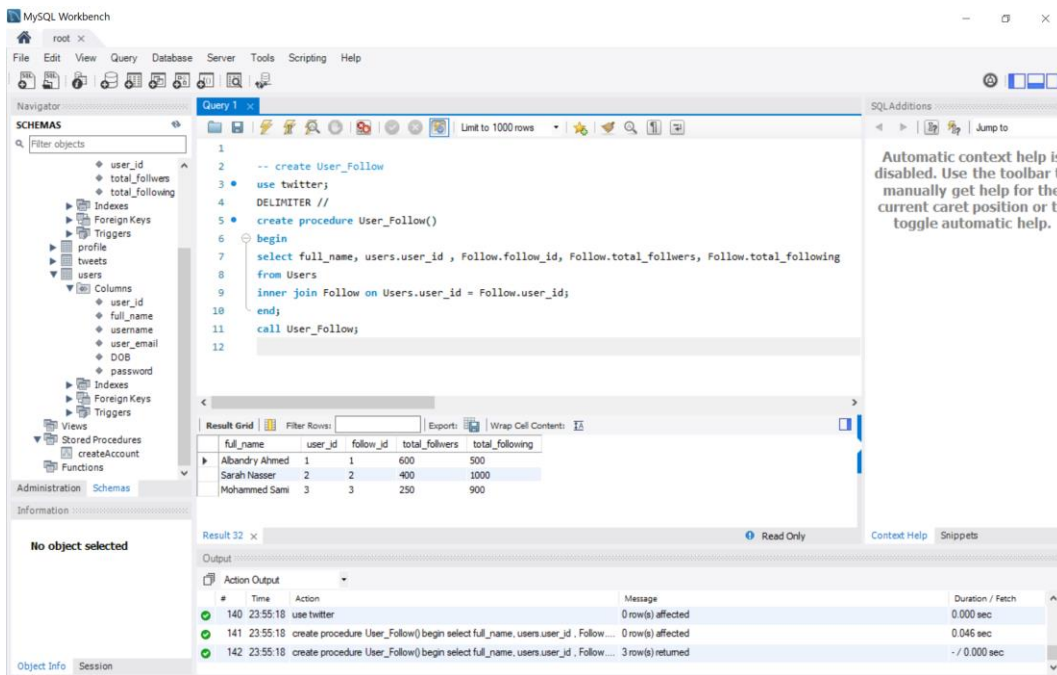
```

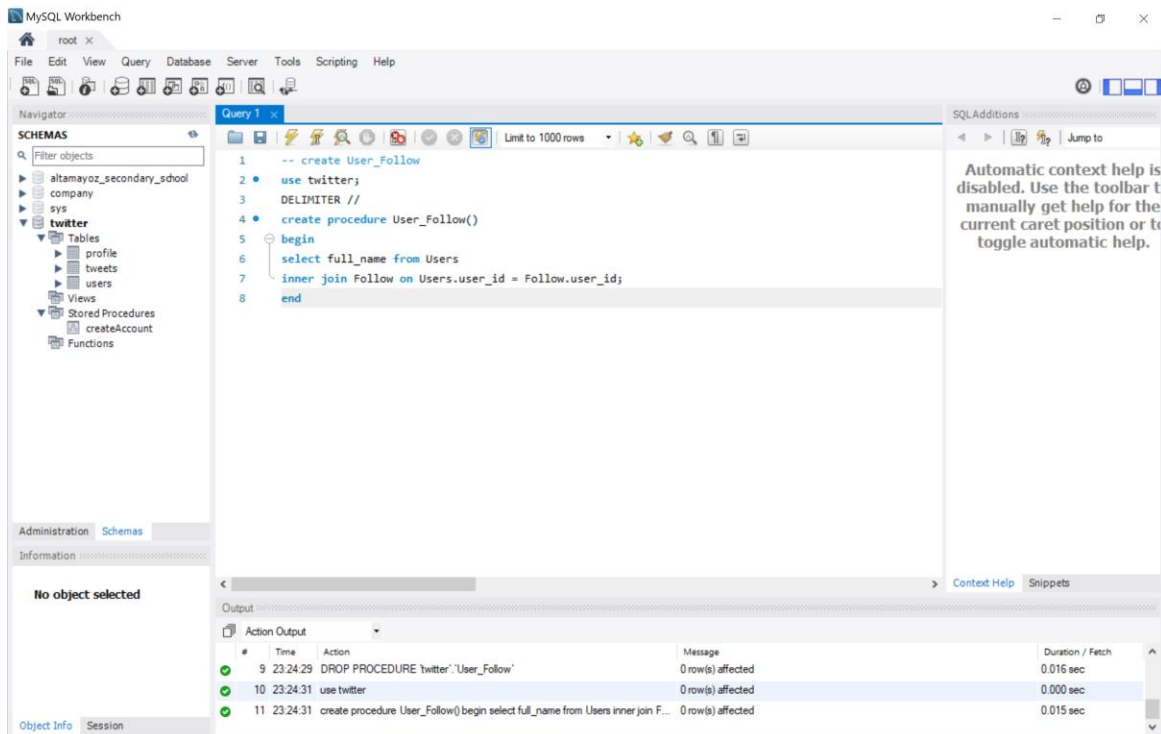
1 -- create createAccount
2 use twitter;
3 DELIMITER //
4 create procedure createAccount()
5 begin
6 select * from Users, Profile;
7 insert into Users(user_id, total_following, total_followers, total_tweets, bio)
8 values(1,400, 1000, 8000,"BS students, Photographer and Dreamer"),
9 (2,606, 500, 5400,"Always Ambitious"),
10 (3,250, 900, 3700,"Master degree in Data Science");
11 insert into profile(user_id,full_name,username,user_email,DOB,password)
12 values
13 (1,"Albandry Ahmed", "@bandryQ", "albandry@gmail.com",'1997-01-27',md5('112244')),
14 (2,"Sarah Nasser", "@sara", "saran@gmail.com",'1991-07-82',md5('321188')),
15 (3,"Mohammed Sami", "@Mohammed", "Mohammed@gmail.com",'1995-01-04',md5('441122'));
16 end
17
18

```

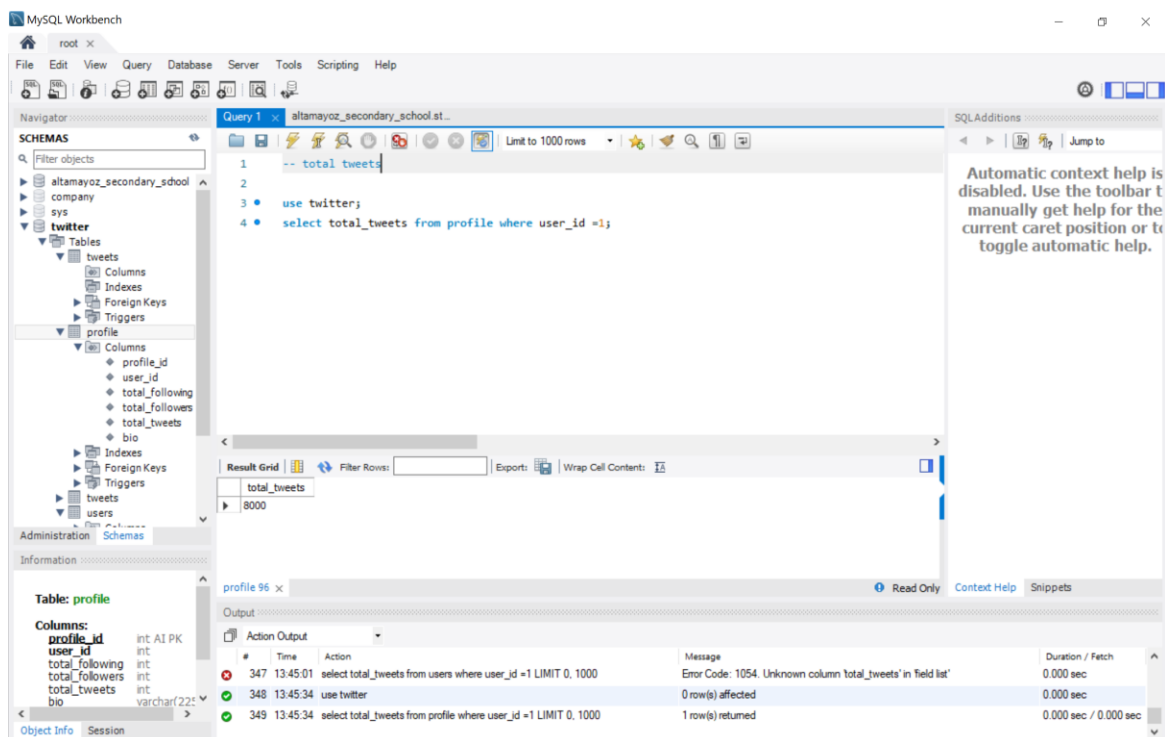


- قم بإنشاء Procedure باسم User_Follow سوف نمرر له اسم المستخدم نفسه واسم المستخدم المراد متابعته فسوف يبحث عن الرقم التسلسلي الخاص لكلا المستخدمين وسيتم إضافته بجدول المتابعة.





- اعرض عدد التغريدات لمستخدم واحد فقط



Source Code

```
-- create users table

create table Users(
user_id int primary key auto_increment,
full_name varchar(225),
username varchar(225),
user_email varchar(225),
DOB date,
password (64)BINARY
);

-----

-- create tweets table

use twitter;

create table Tweets(
tweet_id int auto_increment,
user_id int,
message varchar(225),
total_retweets int,
total_likes int,
times datetime,
primary key (tweet_id),
foreign key (user_id) references Users(user_id)
);

-----

-- create profile table

use twitter;
```

```
create table Profile(  
  profile_id int auto_increment,  
  user_id int,  
  total_following int,  
  total_followers int,  
  total_tweets int,  
  bio varchar(225),  
  primary key (profile_id),  
  foreign key (user_id) references Users(user_id)  
  );
```

```
-- create Likes table  
use twitter;  
create table likes(  
  like_id int auto_increment,  
  user_id int,  
  total_likes int,  
  primary key (like_id),  
  foreign key (user_id) references Users(user_id)  
  );
```

```
-- create Follow table  
use twitter;  
create table Follow(  
  follow_id int auto_increment,  
  user_id int,  
  total_followers int,  
  total_following int,  
  primary key (follow_id),
```

```
foreign key (user_id) references Users(user_id)

);

-----

-- insert into tweets table

use twitter;

insert into Users(full_name,username,user_email,DOB,password)

values

("Albandry Ahmed", "@bandryQ", "albandry@gmail.com",'1997-01-27',md5('112244')),

("Sarah Nasser" , "@sara", "saran@gmail.com",'1991-07-02',md5('321188')),

("Mohammed Sami", "@Mohammed", "Mohammed@gmail.com",'1995-01-04',md5('441122'));

-----

-- insert into profile table

use twitter;

insert into Profile(user_id ,total_following, total_followers, total_tweets, bio)

values(1,400, 1000, 8000,"BS students, Photographer and Dreamer"),

(2,606, 500, 5400,"Always Ambitious"),

(3,250, 900, 3700,"Master degree in Data Science");

-----

-- insert into tweet table

use twitter;

insert into tweets(user_id, message, total_retweets, total_likes, times)

values(1, "Good Morning!", 10, 5, '2021-01-01 08:00:01'),

(2, "Hello everyonw, what's new?!", 5, 7, '2020-01-01 03:00:01'),

(3, "Congratulations! Finaly I graduated..", 100, 46, '2021-05-01 04:12:00');

-----

-- create createAccount procedure

use twitter;

DELIMITER //

create procedure createAccount()
```

```
begin
    select *
    from users
    cross join profile;
end

-----

-- create createAccount

    use twitter;

    DELIMITER //

create procedure createAccount()

    begin

    select * from Users;
    select * from Profile;

    end;

    call createAccount;

-----

-- create User_Follow

    use twitter;

    DELIMITER //

create procedure User_Follow()

    begin

select username, full_name from Users, Profile;

    end

-- create User_Follow
```

```
use twitter;

DELIMITER //

create procedure User_Follow()

begin

select full_name, users.user_id , Follow.follow_id, Follow.total_followers, Follow.total_following

from Users

inner join Follow on Users.user_id = Follow.user_id;

end;

call User_Follow;

-----

-- create User_Follow

use twitter;

DELIMITER //

create procedure User_Follow()

begin

alter table Users

add followers int;

select username, full_name from Users where user_id=1;

insert into Users(followers) value(2);

end

-----

-- total tweets

use twitter;

select total_tweets from profile where user_id =1;
```