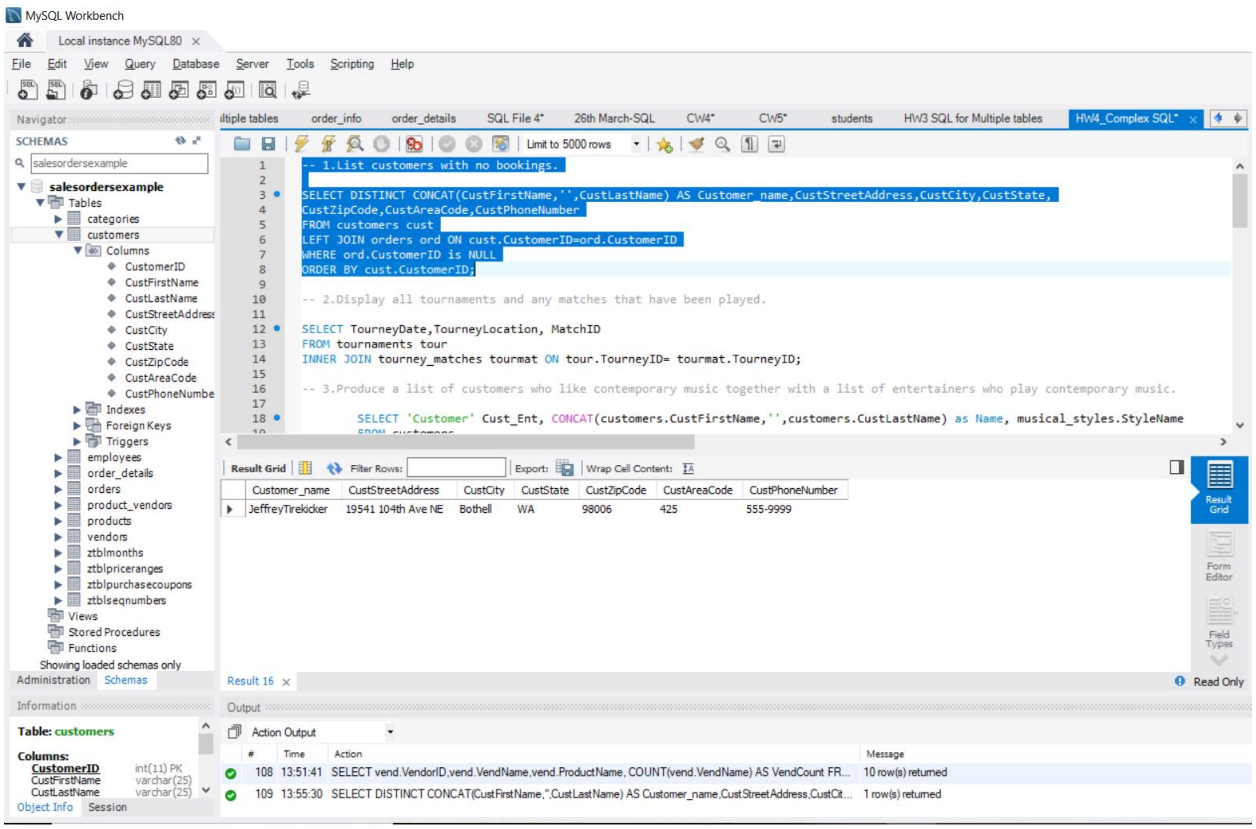
Q1. List customers with no bookings.

```
SELECT DISTINCT CONCAT(CustFirstName,'',CustLastName) AS
Customer_name,CustStreetAddress,CustCity,CustState,

CustZipCode,CustAreaCode,CustPhoneNumber

FROM customers cust

LEFT JOIN orders ord ON cust.CustomerID=ord.CustomerID

WHERE ord.CustomerID is NULL

ORDER BY cust.CustomerID;
```



```
-- 1.List customers with no bookings.

SELECT DISTINCT CONCAT(CustFirstName,'',CustLastName) AS Customer_name,CustStreetAddress,CustCity,CustState,
CustZipCode,CustAreaCode,CustPhoneNumber
FROM customers cust
LEFT JOIN orders ord ON cust.CustomerID=ord.CustomerID
WHERE ord.CustomerID is NULL
ORDER BY cust.CustomerID;

-- 2.Display all tournaments and any matches that have been played.

SELECT TourneyDate,TourneyLocation, MatchID
FROM tournaments tour
INNER JOIN tourney_matches tourmat ON tour.TourneyID= tourmat.TourneyID;

-- 3.Produce a list of customers who like contemporary music together with a list of entertainers who play contemporary music.

        SELECT 'Customer' Cust_Ent, CONCAT(customers.CustFirstName,'',customers.CustLastName) as Name, musical_styles.StyleName
```

Customer_name	CustStreetAddress	CustCity	CustState	CustZipCode	CustAreaCode	CustPhoneNumber
JeffreyTirekicker	19541 104th Ave NE	Bothell	WA	98006	425	555-9999

Information

Table: customers

Columns:

CustomerID	int(11) PK
CustFirstName	varchar(25)
CustLastName	varchar(25)

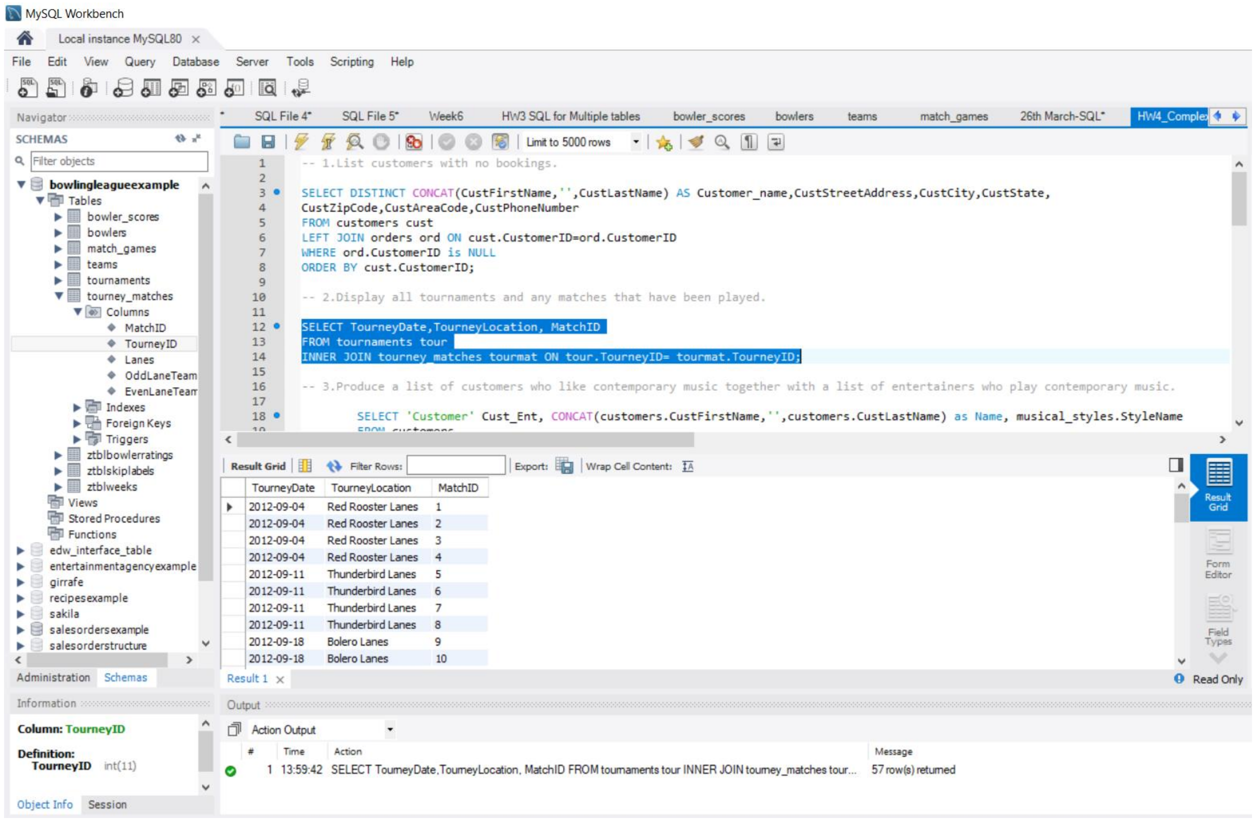
Output

Action Output

```
#    Time      Action                                                                                 Message
108  13:51:41  SELECT vend.VendorID,vend.VendName,vend.ProductName, COUNT(vend.VendName) AS VendCount FR...  10 row(s) returned
109  13:55:30  SELECT DISTINCT CONCAT(CustFirstName,'',CustLastName) AS Customer_name,CustStreetAddress,CustCit...  1 row(s) returned
```

Q2. Display all tournaments and any matches that have been played.

```
SELECT TourneyDate,TourneyLocation, MatchID

FROM tournaments tour

INNER JOIN tourney_matches tourmat ON tour.TourneyID= tourmat.TourneyID;
```



```
-- 1.List customers with no bookings.

SELECT DISTINCT CONCAT(CustFirstName,'',CustLastName) AS Customer_name,CustStreetAddress,CustCity,CustState,
CustZipCode,CustAreaCode,CustPhoneNumber
FROM customers cust
LEFT JOIN orders ord ON cust.CustomerID=ord.CustomerID
WHERE ord.CustomerID is NULL
ORDER BY cust.CustomerID;

-- 2.Display all tournaments and any matches that have been played.

SELECT TourneyDate,TourneyLocation, MatchID
FROM tournaments tour
INNER JOIN tourney_matches tourmat ON tour.TourneyID= tourmat.TourneyID;

-- 3.Produce a list of customers who like contemporary music together with a list of entertainers who play contemporary music.

        SELECT 'Customer' Cust_Ent, CONCAT(customers.CustFirstName,'',customers.CustLastName) as Name, musical_styles.StyleName
```

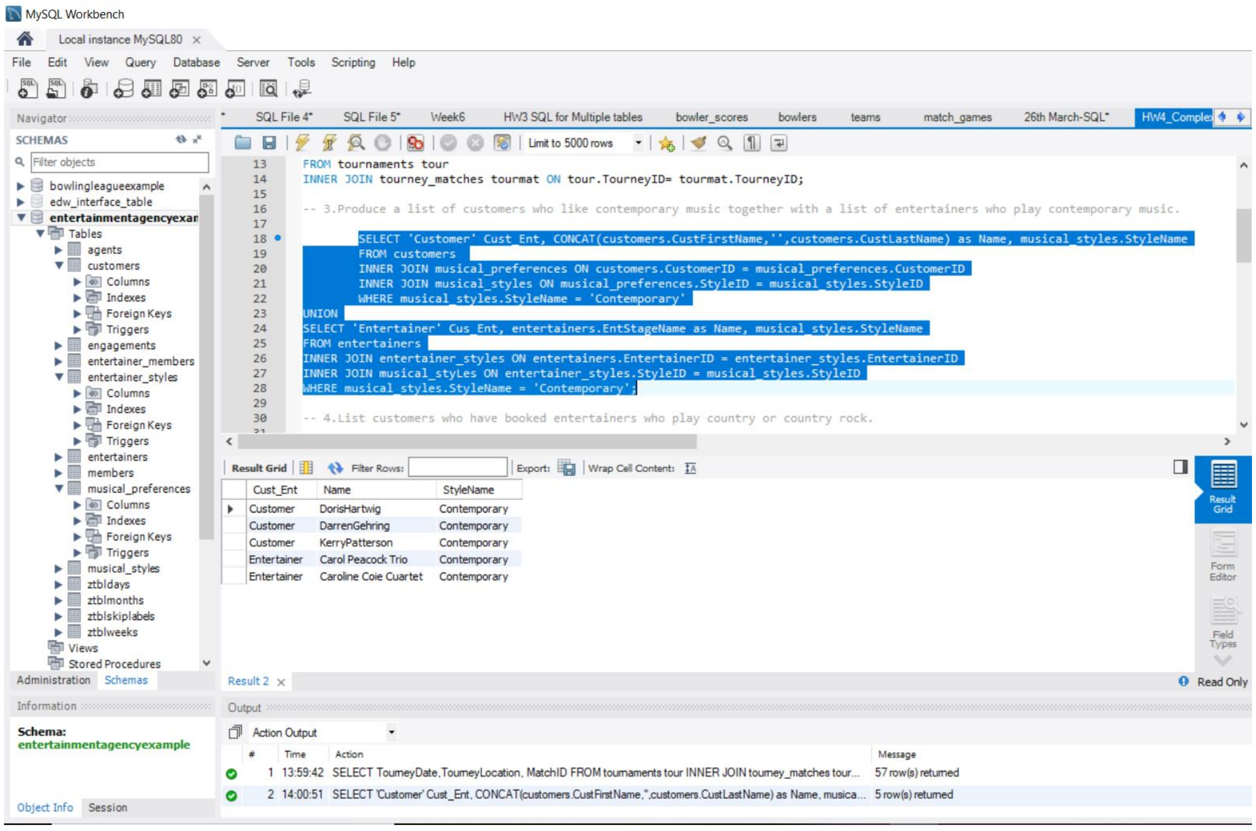
TourneyDate	TourneyLocation	MatchID
2012-09-04	Red Rooster Lanes	1
2012-09-04	Red Rooster Lanes	2
2012-09-04	Red Rooster Lanes	3
2012-09-04	Red Rooster Lanes	4
2012-09-11	Thunderbird Lanes	5
2012-09-11	Thunderbird Lanes	6
2012-09-11	Thunderbird Lanes	7
2012-09-11	Thunderbird Lanes	8
2012-09-18	Bolero Lanes	9
2012-09-18	Bolero Lanes	10

```
#  Time      Action                                                                                   Message
1  13:59:42  SELECT TourneyDate,TourneyLocation, MatchID FROM tournaments tour INNER JOIN tourney_matches tour...   57 row(s) returned
```

Column: TourneyID
Definition:
TourneyID int(11)

Q3.Produce a list of customers who like contemporary music together with a list of entertainers who play contemporary music.

```
                    SELECT 'Customer' Cust_Ent,
CONCAT(customers.CustFirstName,'',customers.CustLastName) as Name, musical_styles.StyleName
                    FROM customers
                    INNER JOIN musical_preferences ON customers.CustomerID =
musical_preferences.CustomerID
                    INNER JOIN musical_styles ON musical_preferences.StyleID = musical_styles.StyleID
                    WHERE musical_styles.StyleName = 'Contemporary'
UNION
SELECT 'Entertainer' Cus_Ent, entertainers.EntStageName as Name, musical_styles.StyleName
FROM entertainers
INNER JOIN entertainer_styles ON entertainers.EntertainerID = entertainer_styles.EntertainerID
INNER JOIN musical_styLes ON entertainer_styles.StyleID = musical_styles.StyleID
WHERE musical_styles.StyleName = 'Contemporary';
```



Schema:
entertainmentagencyexample

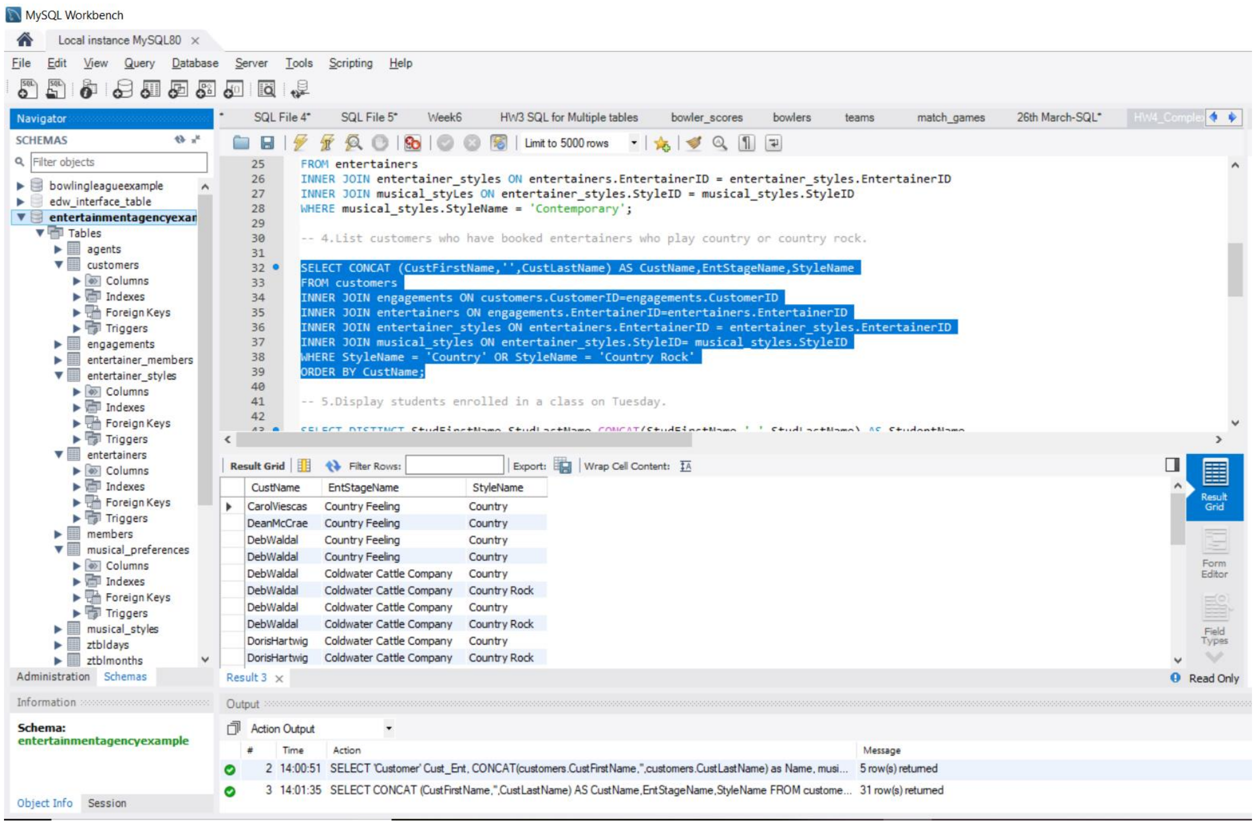
```
FROM tournaments tour
INNER JOIN tourney_matches tourmat ON tour.TourneyID= tourmat.TourneyID;

-- 3.Produce a list of customers who like contemporary music together with a list of entertainers who play contemporary music.

        SELECT 'Customer' Cust_Ent, CONCAT(customers.CustFirstName,'',customers.CustLastName) as Name, musical_styles.StyleName
        FROM customers
        INNER JOIN musical_preferences ON customers.CustomerID = musical_preferences.CustomerID
        INNER JOIN musical_styles ON musical_preferences.StyleID = musical_styles.StyleID
        WHERE musical_styles.StyleName = 'Contemporary'
UNION
SELECT 'Entertainer' Cus_Ent, entertainers.EntStageName as Name, musical_styles.StyleName
FROM entertainers
INNER JOIN entertainer_styles ON entertainers.EntertainerID = entertainer_styles.EntertainerID
INNER JOIN musical_styLes ON entertainer_styles.StyleID = musical_styles.StyleID
WHERE musical_styles.StyleName = 'Contemporary';

-- 4.List customers who have booked entertainers who play country or country rock.
```

Cust_Ent	Name	StyleName
Customer	DorisHartwig	Contemporary
Customer	DarrenGehring	Contemporary
Customer	KerryPatterson	Contemporary
Entertainer	Carol Peacock Trio	Contemporary
Entertainer	Caroline Coie Cuartet	Contemporary

```
#  Time      Action                                                                                  Message
1  13:59:42  SELECT TourneyDate,TourneyLocation, MatchID FROM tournaments tour INNER JOIN tourney_matches tour...  57 row(s) returned
2  14:00:51  SELECT 'Customer' Cust_Ent, CONCAT(customers.CustFirstName,'',customers.CustLastName) as Name, musica...  5 row(s) returned
```

Q4. List customers who have booked entertainers who play country or country rock.

```
SELECT CONCAT (CustFirstName,'',CustLastName) AS CustName,EntStageName,StyleName

FROM customers

INNER JOIN engagements ON customers.CustomerID=engagements.CustomerID

INNER JOIN entertainers ON engagements.EntertainerID=entertainers.EntertainerID

INNER JOIN entertainer_styles ON entertainers.EntertainerID = entertainer_styles.EntertainerID

INNER JOIN musical_styles ON entertainer_styles.StyleID= musical_styles.StyleID

WHERE StyleName = 'Country' OR StyleName = 'Country Rock'

ORDER BY CustName;
```



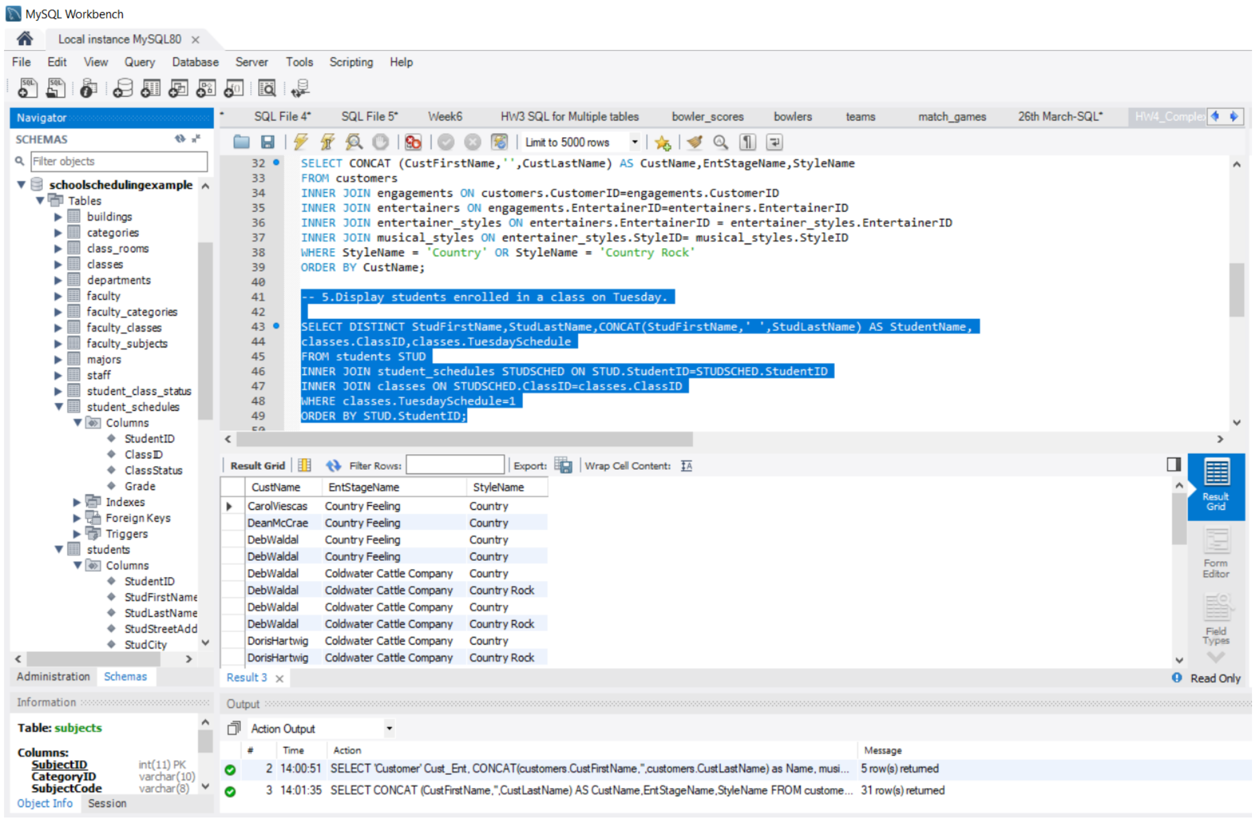
```
FROM entertainers
INNER JOIN entertainer_styles ON entertainers.EntertainerID = entertainer_styles.EntertainerID
INNER JOIN musical_styLes ON entertainer_styles.StyleID = musical_styles.StyleID
WHERE musical_styles.StyleName = 'Contemporary';

-- 4.List customers who have booked entertainers who play country or country rock.

SELECT CONCAT (CustFirstName,'',CustLastName) AS CustName,EntStageName,StyleName
FROM customers
INNER JOIN engagements ON customers.CustomerID=engagements.CustomerID
INNER JOIN entertainers ON engagements.EntertainerID=entertainers.EntertainerID
INNER JOIN entertainer_styles ON entertainers.EntertainerID = entertainer_styles.EntertainerID
INNER JOIN musical_styles ON entertainer_styles.StyleID= musical_styles.StyleID
WHERE StyleName = 'Country' OR StyleName = 'Country Rock'
ORDER BY CustName;

-- 5.Display students enrolled in a class on Tuesday.
```

CustName	EntStageName	StyleName
CarolViescas	Country Feeling	Country
DeanMcCrae	Country Feeling	Country
DebWaldal	Country Feeling	Country
DebWaldal	Country Feeling	Country
DebWaldal	Coldwater Cattle Company	Country
DebWaldal	Coldwater Cattle Company	Country Rock
DebWaldal	Coldwater Cattle Company	Country
DebWaldal	Coldwater Cattle Company	Country Rock
DorisHartwig	Coldwater Cattle Company	Country
DorisHartwig	Coldwater Cattle Company	Country Rock

#	Time	Action	Message
2	14:00:51	SELECT 'Customer' Cust_Ent, CONCAT(customers.CustFirstName,'',customers.CustLastName) as Name, musi...	5 row(s) returned
3	14:01:35	SELECT CONCAT (CustFirstName,'',CustLastName) AS CustName,EntStageName,StyleName FROM custome...	31 row(s) returned

Q5.Display students enrolled in a class on Tuesday.

```
SELECT DISTINCT StudFirstName,StudLastName,CONCAT(StudFirstName,' ',StudLastName) AS StudentName,
classes.ClassID,classes.TuesdaySchedule
FROM students STUD
INNER JOIN student_schedules STUDSCHED ON STUD.StudentID=STUDSCHED.StudentID
INNER JOIN classes ON STUDSCHED.ClassID=classes.ClassID
WHERE classes.TuesdaySchedule=1
ORDER BY STUD.StudentID;
```



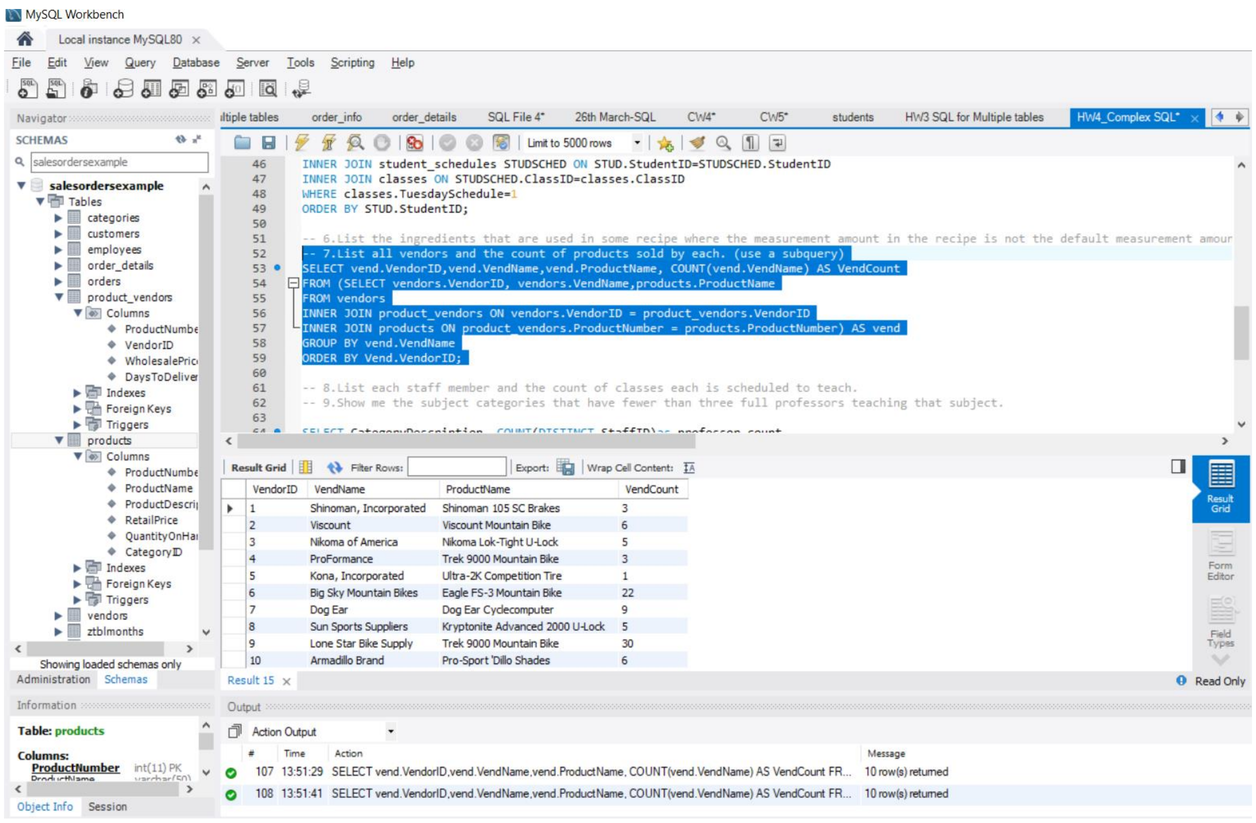
```
SELECT CONCAT (CustFirstName,'',CustLastName) AS CustName,EntStageName,StyleName
FROM customers
INNER JOIN engagements ON customers.CustomerID=engagements.CustomerID
INNER JOIN entertainers ON engagements.EntertainerID=entertainers.EntertainerID
INNER JOIN entertainer_styles ON entertainers.EntertainerID = entertainer_styles.EntertainerID
INNER JOIN musical_styles ON entertainer_styles.StyleID= musical_styles.StyleID
WHERE StyleName = 'Country' OR StyleName = 'Country Rock'
ORDER BY CustName;

-- 5.Display students enrolled in a class on Tuesday.

SELECT DISTINCT StudFirstName,StudLastName,CONCAT(StudFirstName,' ',StudLastName) AS StudentName,
classes.ClassID,classes.TuesdaySchedule
FROM students STUD
INNER JOIN student_schedules STUDSCHED ON STUD.StudentID=STUDSCHED.StudentID
INNER JOIN classes ON STUDSCHED.ClassID=classes.ClassID
WHERE classes.TuesdaySchedule=1
ORDER BY STUD.StudentID;
```

CustName	EntStageName	StyleName
CarolViescas	Country Feeling	Country
DeanMcCrae	Country Feeling	Country
DebWaldal	Country Feeling	Country
DebWaldal	Country Feeling	Country
DebWaldal	Coldwater Cattle Company	Country
DebWaldal	Coldwater Cattle Company	Country Rock
DebWaldal	Coldwater Cattle Company	Country
DebWaldal	Coldwater Cattle Company	Country Rock
DorisHartwig	Coldwater Cattle Company	Country
DorisHartwig	Coldwater Cattle Company	Country Rock

```
#  Time      Action                                                                                       Message
2  14:00:51  SELECT 'Customer' Cust_Ent, CONCAT(customers.CustFirstName,'',customers.CustLastName) as Name, musi...  5 row(s) returned
3  14:01:35  SELECT CONCAT (CustFirstName,'',CustLastName) AS CustName,EntStageName,StyleName FROM custome...  31 row(s) returned
```

Q7.List all vendors and the count of products sold by each. (use a subquery)

```
SELECT vend.VendorID,vend.VendName,vend.ProductName, COUNT(vend.VendName) AS VendCount
FROM (SELECT vendors.VendorID, vendors.VendName,products.ProductName
FROM vendors
INNER JOIN product_vendors ON vendors.VendorID = product_vendors.VendorID
INNER JOIN products ON product_vendors.ProductNumber = products.ProductNumber) AS vend
GROUP BY vend.VendName
ORDER BY Vend.VendorID;
```



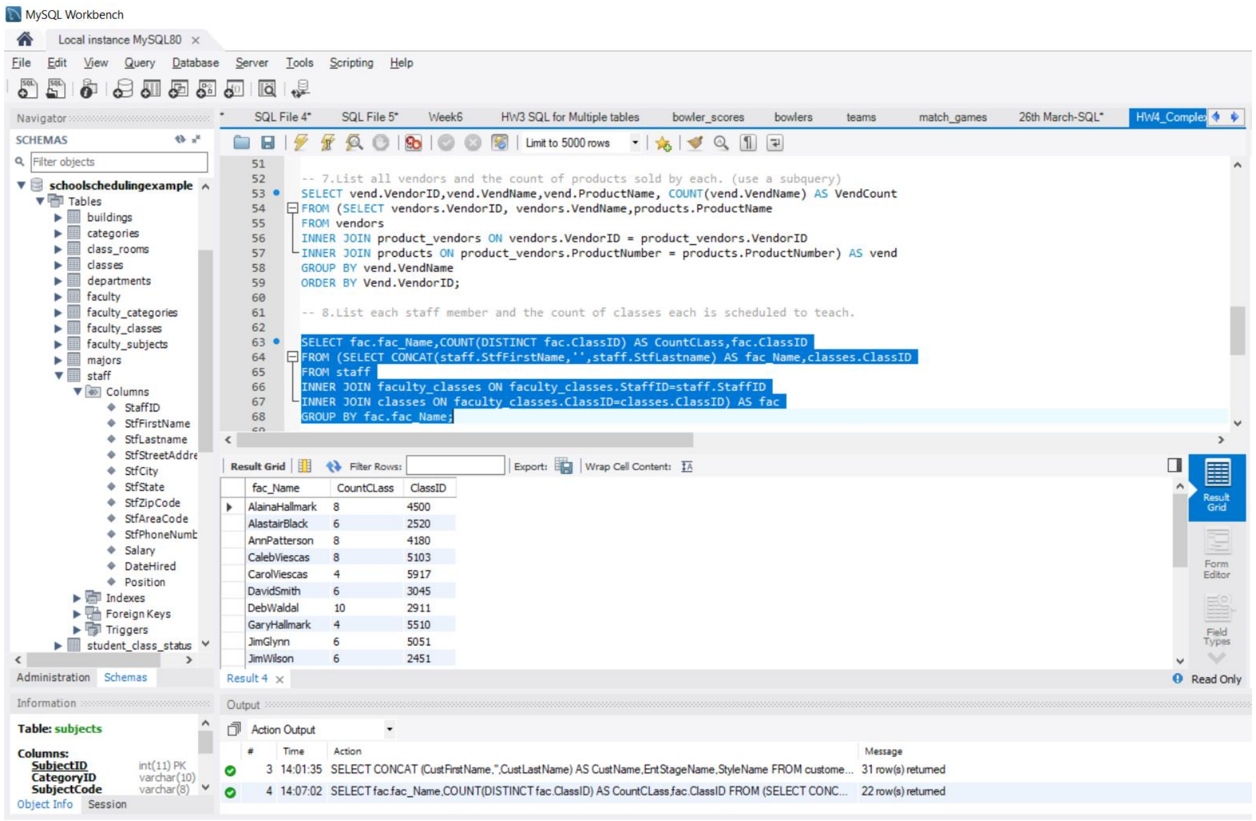
```
INNER JOIN student_schedules STUDSCHED ON STUD.StudentID=STUDSCHED.StudentID
INNER JOIN classes ON STUDSCHED.ClassID=classes.ClassID
WHERE classes.TuesdaySchedule=1
ORDER BY STUD.StudentID;

-- 6.List the ingredients that are used in some recipe where the measurement amount in the recipe is not the default measurement amour
-- 7.List all vendors and the count of products sold by each. (use a subquery)
SELECT vend.VendorID,vend.VendName,vend.ProductName, COUNT(vend.VendName) AS VendCount
FROM (SELECT vendors.VendorID, vendors.VendName,products.ProductName
FROM vendors
INNER JOIN product_vendors ON vendors.VendorID = product_vendors.VendorID
INNER JOIN products ON product_vendors.ProductNumber = products.ProductNumber) AS vend
GROUP BY vend.VendName
ORDER BY Vend.VendorID;

-- 8.List each staff member and the count of classes each is scheduled to teach.
-- 9.Show me the subject categories that have fewer than three full professors teaching that subject.
```

VendorID	VendName	ProductName	VendCount
1	Shinoman, Incorporated	Shinoman 105 SC Brakes	3
2	Viscount	Viscount Mountain Bike	6
3	Nikoma of America	Nikoma Lok-Tight U-Lock	5
4	ProFormance	Trek 9000 Mountain Bike	3
5	Kona, Incorporated	Ultra-2K Competition Tire	1
6	Big Sky Mountain Bikes	Eagle FS-3 Mountain Bike	22
7	Dog Ear	Dog Ear Cyclecomputer	9
8	Sun Sports Suppliers	Kryptonite Advanced 2000 U-Lock	5
9	Lone Star Bike Supply	Trek 9000 Mountain Bike	30
10	Armadillo Brand	Pro-Sport 'Dillo Shades	6

```
#    Time      Action                                                                               Message
107  13:51:29  SELECT vend.VendorID,vend.VendName,vend.ProductName, COUNT(vend.VendName) AS VendCount FR...  10 row(s) returned
108  13:51:41  SELECT vend.VendorID,vend.VendName,vend.ProductName, COUNT(vend.VendName) AS VendCount FR...  10 row(s) returned
```

Q8. List each staff member and the count of classes each is scheduled to teach.

```
SELECT fac.fac_Name,COUNT(DISTINCT fac.ClassID) AS CountCLass,fac.ClassID

FROM (SELECT CONCAT(staff.StfFirstName,'',staff.StfLastname) AS fac_Name,classes.ClassID

FROM staff

INNER JOIN faculty_classes ON faculty_classes.StaffID=staff.StaffID

INNER JOIN classes ON faculty_classes.ClassID=classes.ClassID) AS fac

GROUP BY fac.fac_Name;
```



```
-- 7.List all vendors and the count of products sold by each. (use a subquery)
SELECT vend.VendorID,vend.VendName,vend.ProductName, COUNT(vend.VendName) AS VendCount
FROM (SELECT vendors.VendorID, vendors.VendName,products.ProductName
FROM vendors
INNER JOIN product_vendors ON vendors.VendorID = product_vendors.VendorID
INNER JOIN products ON product_vendors.ProductNumber = products.ProductNumber) AS vend
GROUP BY vend.VendName
ORDER BY Vend.VendorID;

-- 8.List each staff member and the count of classes each is scheduled to teach.

SELECT fac.fac_Name,COUNT(DISTINCT fac.ClassID) AS CountCLass,fac.ClassID
FROM (SELECT CONCAT(staff.StfFirstName,'',staff.StfLastname) AS fac_Name,classes.ClassID
FROM staff
INNER JOIN faculty_classes ON faculty_classes.StaffID=staff.StaffID
INNER JOIN classes ON faculty_classes.ClassID=classes.ClassID) AS fac
GROUP BY fac.fac_Name;
```

fac_Name	CountCLass	ClassID
AlainaHallmark	8	4500
AlastairBlack	6	2520
AnnPatterson	8	4180
CalebViescas	8	5103
CarolViescas	4	5917
DavidSmith	6	3045
DebWaldal	10	2911
GaryHallmark	4	5510
JimGlynn	6	5051
JimWilson	6	2451

```
#  Time      Action                                                                                      Message
3  14:01:35  SELECT CONCAT (CustFirstName,'',CustLastName) AS CustName,EntStageName,StyleName FROM custome...  31 row(s) returned
4  14:07:02  SELECT fac.fac_Name,COUNT(DISTINCT fac.ClassID) AS CountCLass,fac.ClassID FROM (SELECT CONC...   22 row(s) returned
```

Q9.Show me the subject categories that have fewer than three full professors teaching that subject.

SELECT CategoryDescription, COUNT(DISTINCT StaffID)as professor_count

FROM categories CAT

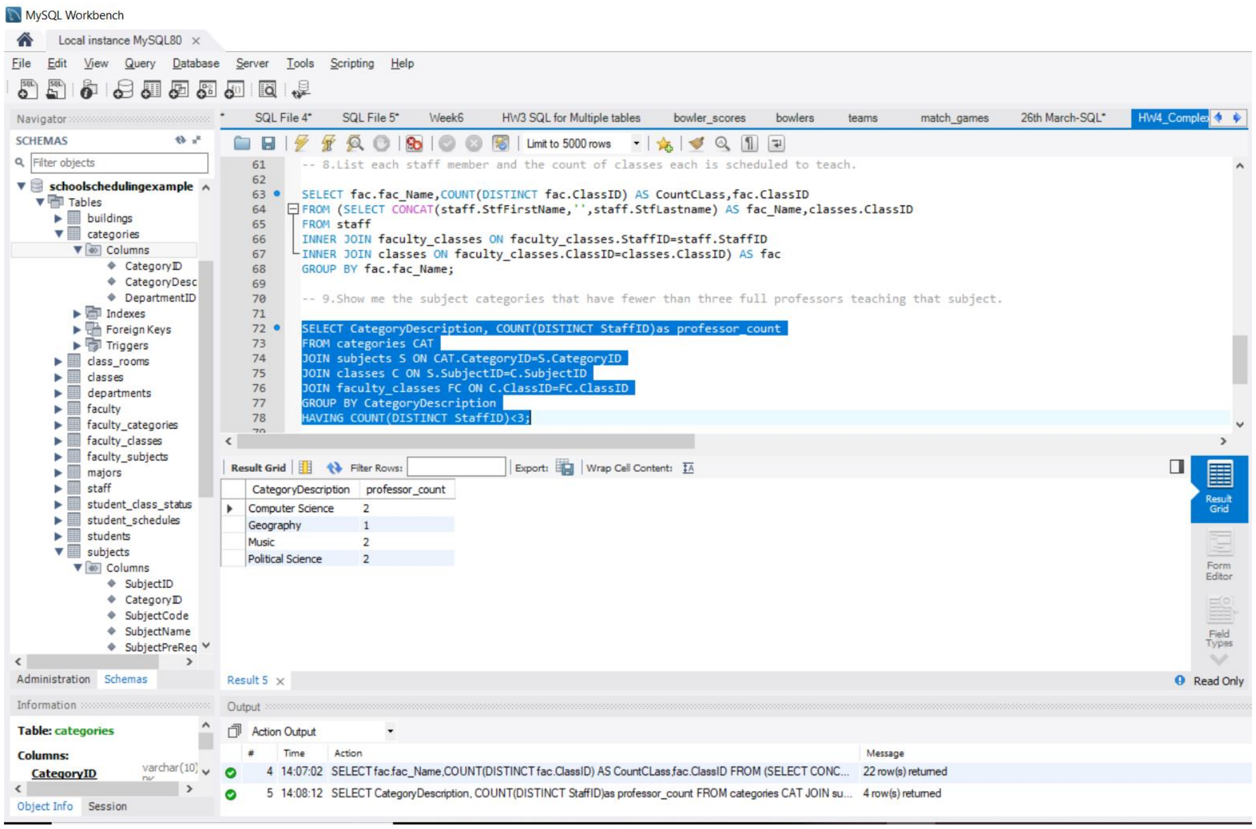
JOIN subjects S ON CAT.CategoryID=S.CategoryID

JOIN classes C ON S.SubjectID=C.SubjectID

JOIN faculty_classes FC ON C.ClassID=FC.ClassID

GROUP BY CategoryDescription

HAVING COUNT(DISTINCT StaffID)<3;



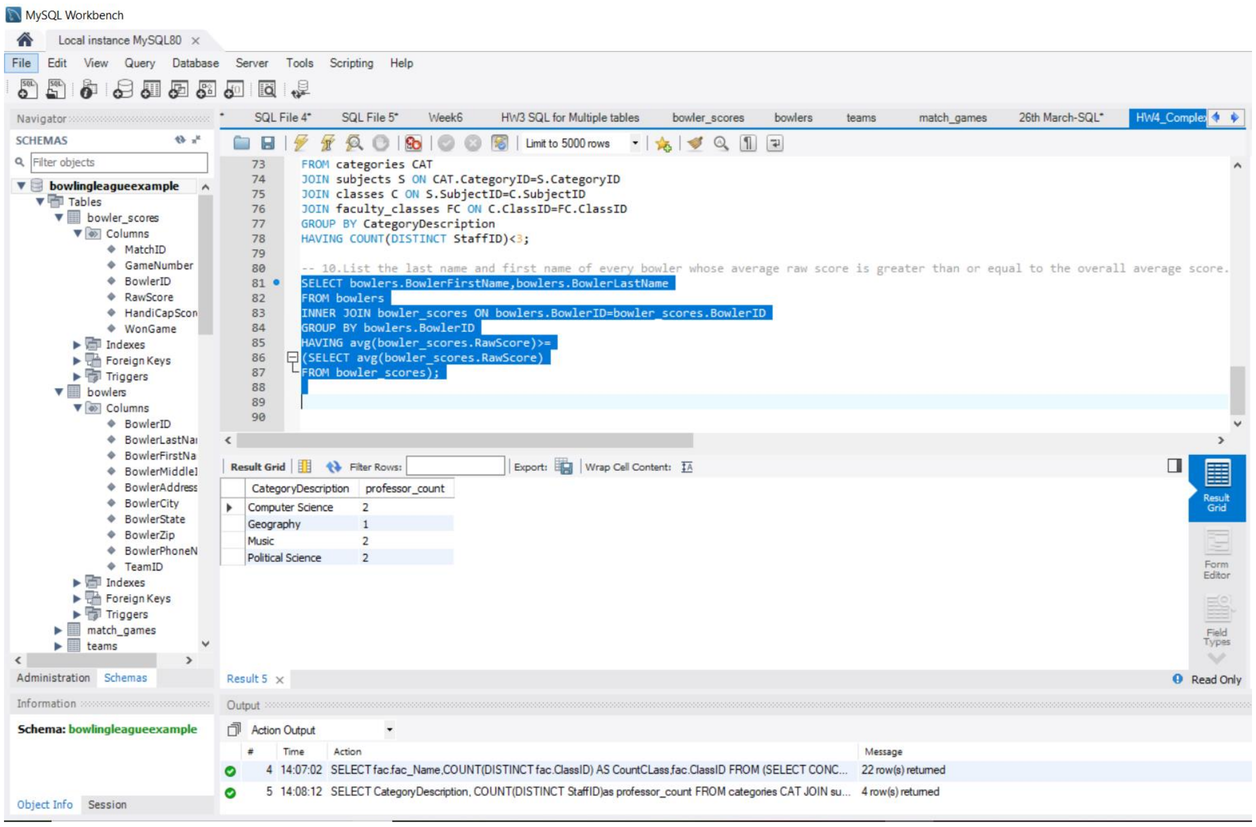
```
-- 8.List each staff member and the count of classes each is scheduled to teach.

SELECT fac.fac_Name,COUNT(DISTINCT fac.ClassID) AS CountCLass,fac.ClassID
FROM (SELECT CONCAT(staff.StfFirstName,'',staff.StfLastname) AS fac_Name,classes.ClassID
FROM staff
INNER JOIN faculty_classes ON faculty_classes.StaffID=staff.StaffID
INNER JOIN classes ON faculty_classes.ClassID=classes.ClassID) AS fac
GROUP BY fac.fac_Name;

-- 9.Show me the subject categories that have fewer than three full professors teaching that subject.

SELECT CategoryDescription, COUNT(DISTINCT StaffID)as professor_count
FROM categories CAT
JOIN subjects S ON CAT.CategoryID=S.CategoryID
JOIN classes C ON S.SubjectID=C.SubjectID
JOIN faculty_classes FC ON C.ClassID=FC.ClassID
GROUP BY CategoryDescription
HAVING COUNT(DISTINCT StaffID)<3;
```

CategoryDescription	professor_count
Computer Science	2
Geography	1
Music	2
Political Science	2

```
#  Time      Action                                                                                       Message
4  14:07:02  SELECT fac.fac_Name,COUNT(DISTINCT fac.ClassID) AS CountCLass,fac.ClassID FROM (SELECT CONC...  22 row(s) returned
5  14:08:12  SELECT CategoryDescription, COUNT(DISTINCT StaffID)as professor_count FROM categories CAT JOIN su...  4 row(s) returned
```

Q10.List the last name and first name of every bowler whose average raw score is greater than or equal to the overall average score.

```
SELECT bowlers.BowlerFirstName,bowlers.BowlerLastName

FROM bowlers

INNER JOIN bowler_scores ON bowlers.BowlerID=bowler_scores.BowlerID

GROUP BY bowlers.BowlerID

HAVING avg(bowler_scores.RawScore)>=

(SELECT avg(bowler_scores.RawScore)

FROM bowler_scores);
```



```
FROM categories CAT
JOIN subjects S ON CAT.CategoryID=S.CategoryID
JOIN classes C ON S.SubjectID=C.SubjectID
JOIN faculty_classes FC ON C.ClassID=FC.ClassID
GROUP BY CategoryDescription
HAVING COUNT(DISTINCT StaffID)<3;

-- 10.List the last name and first name of every bowler whose average raw score is greater than or equal to the overall average score.
SELECT bowlers.BowlerFirstName,bowlers.BowlerLastName
FROM bowlers
INNER JOIN bowler_scores ON bowlers.BowlerID=bowler_scores.BowlerID
GROUP BY bowlers.BowlerID
HAVING avg(bowler_scores.RawScore)>=
(SELECT avg(bowler_scores.RawScore)
FROM bowler_scores);
```

CategoryDescription	professor_count
Computer Science	2
Geography	1
Music	2
Political Science	2

```
#  Time      Action                                                                                        Message
4  14:07:02  SELECT fac.fac_Name,COUNT(DISTINCT fac.ClassID) AS CountCLass,fac.ClassID FROM (SELECT CONC...  22 row(s) returned
5  14:08:12  SELECT CategoryDescription, COUNT(DISTINCT StaffID)as professor_count FROM categories CAT JOIN su...  4 row(s) returned
```