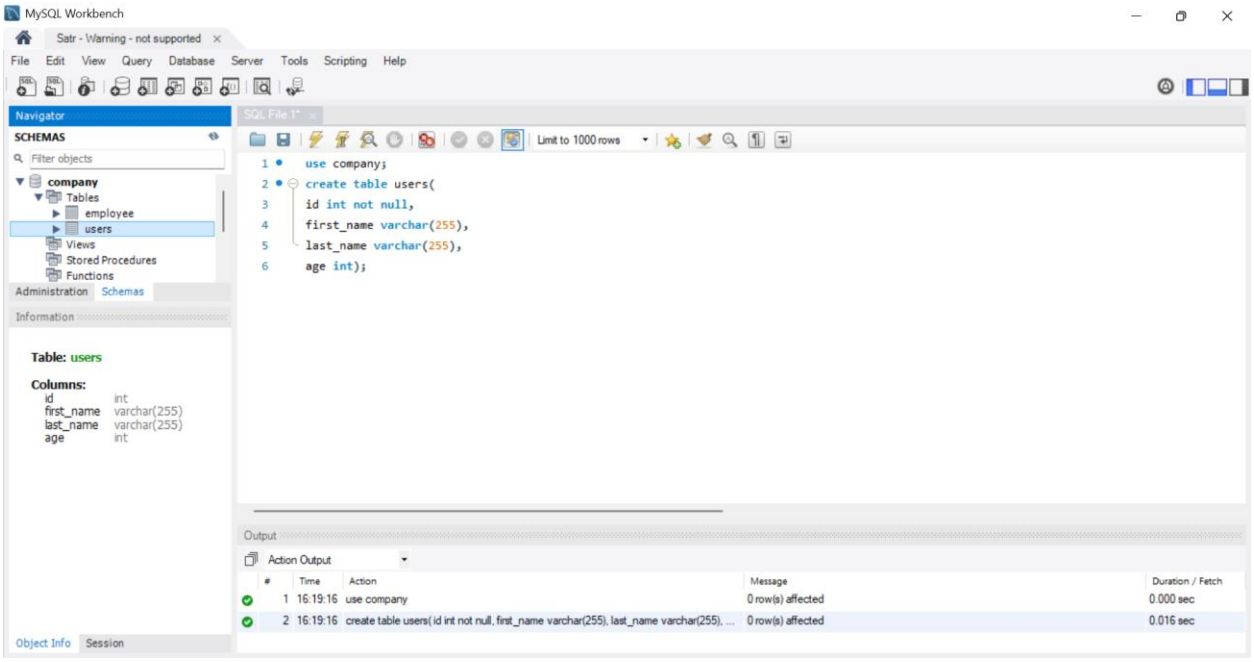
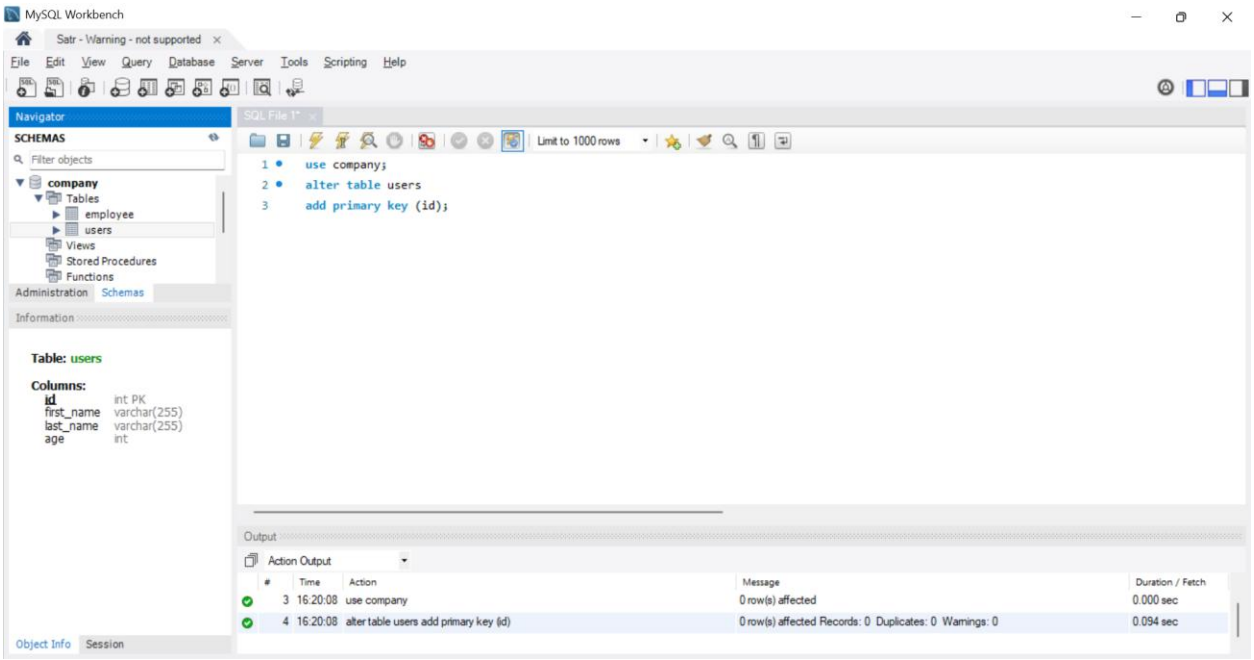
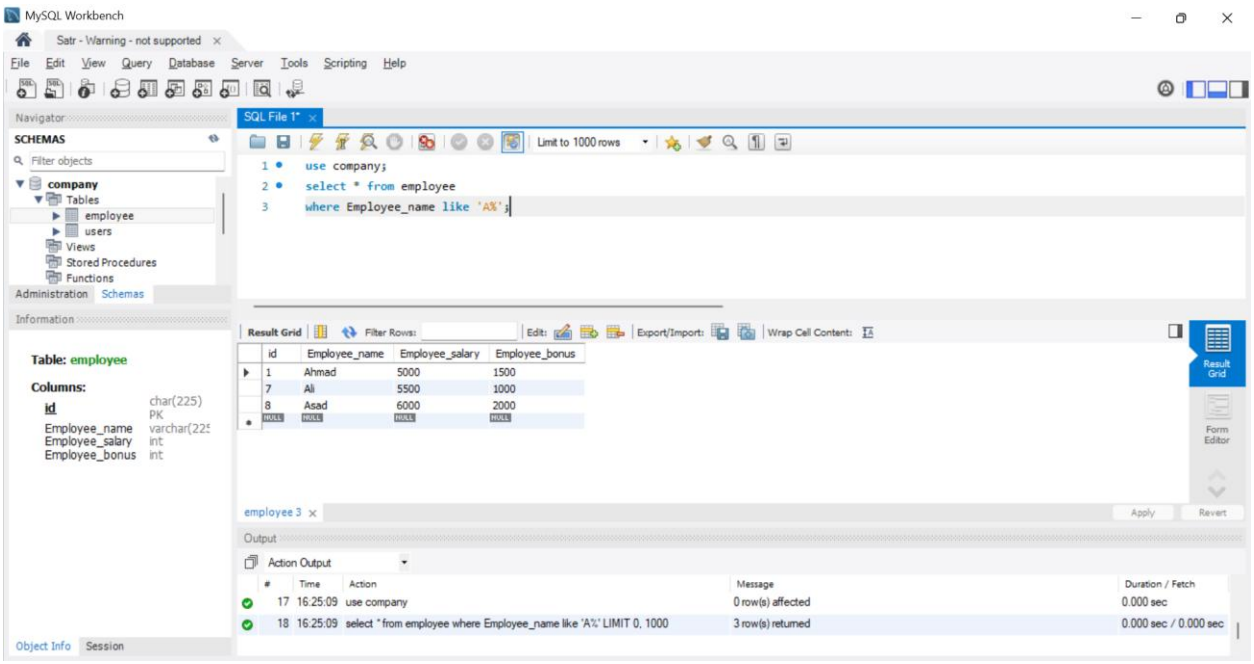
Course: SQL 102 – Satr

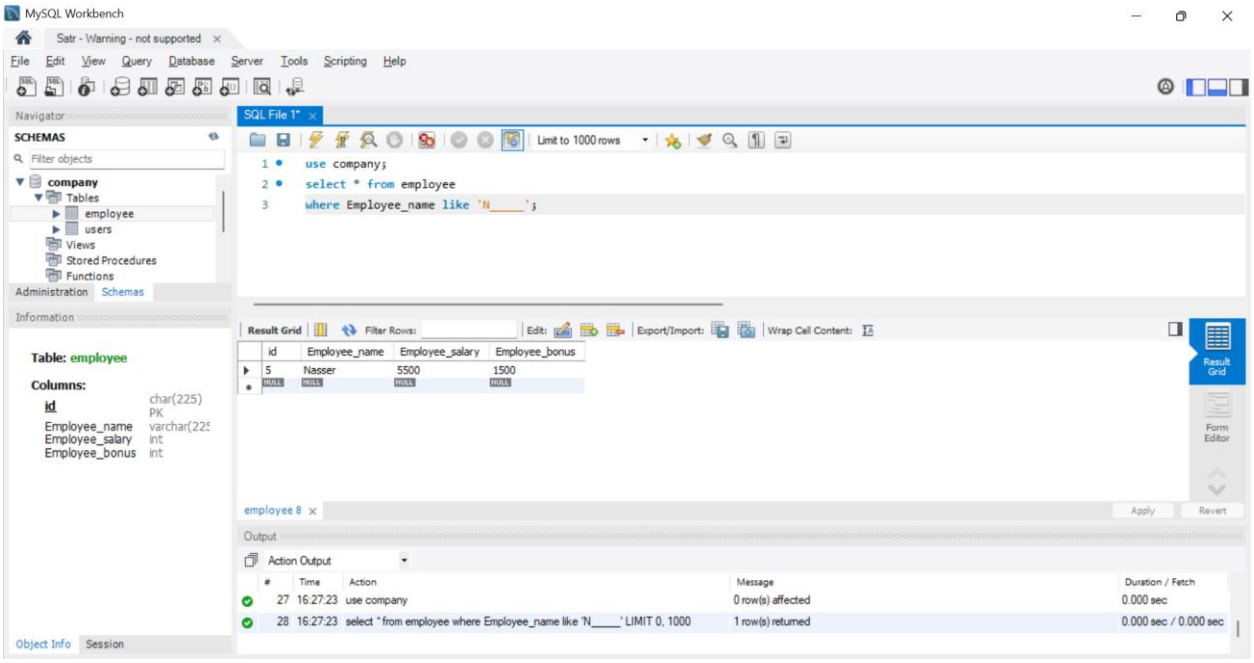
Add primary key to existing table. ✓



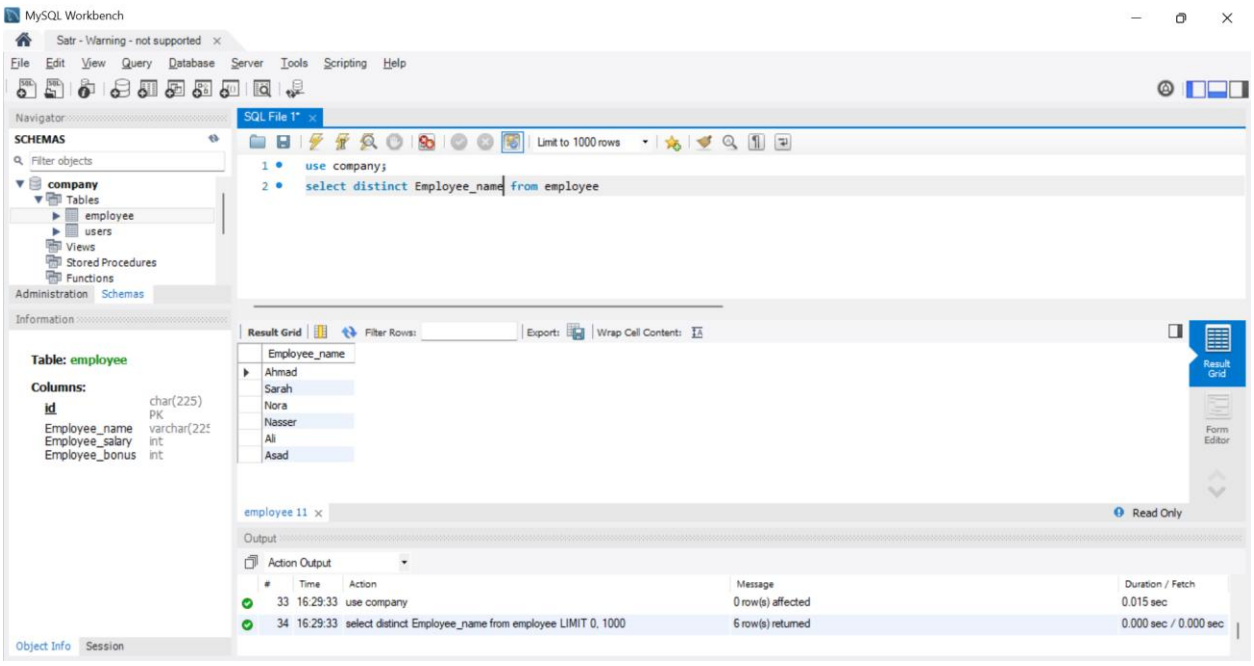


Use like for query. ✓

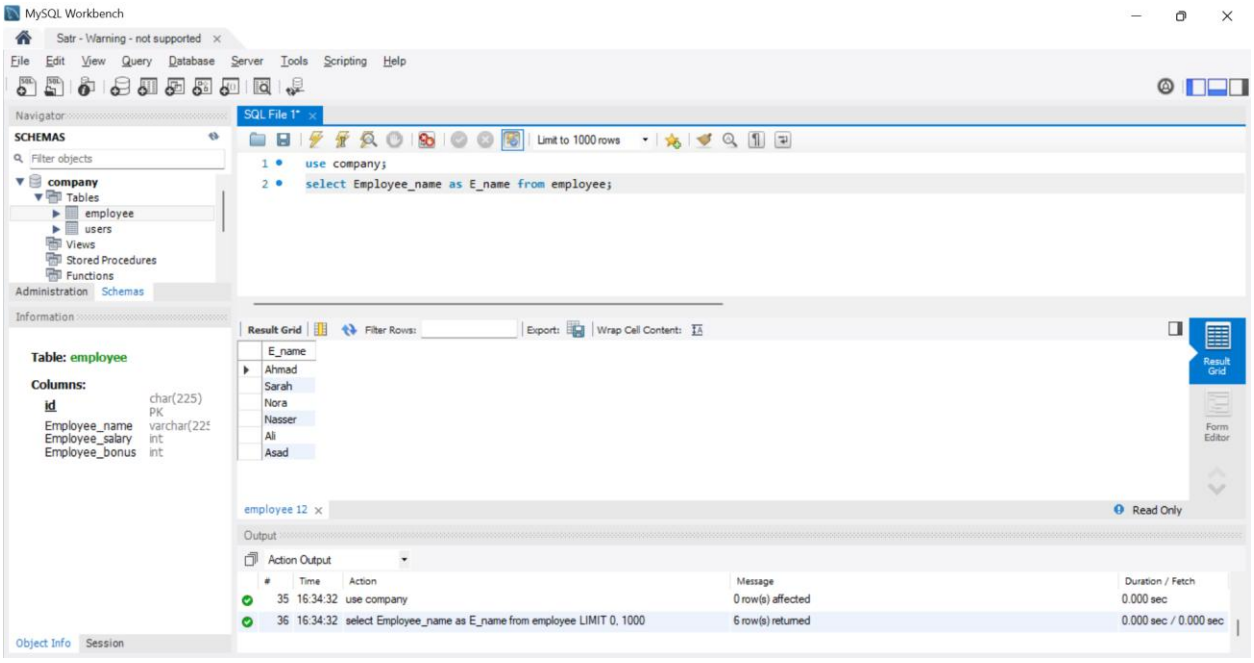




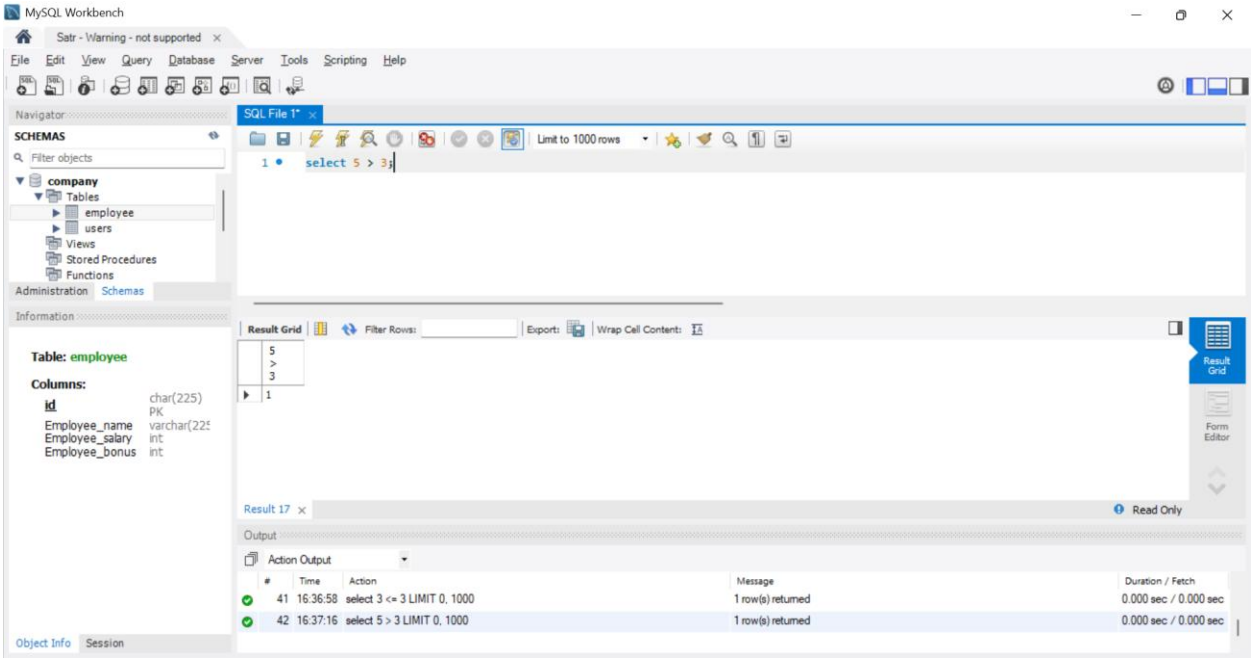
Use distinct for query. ✓

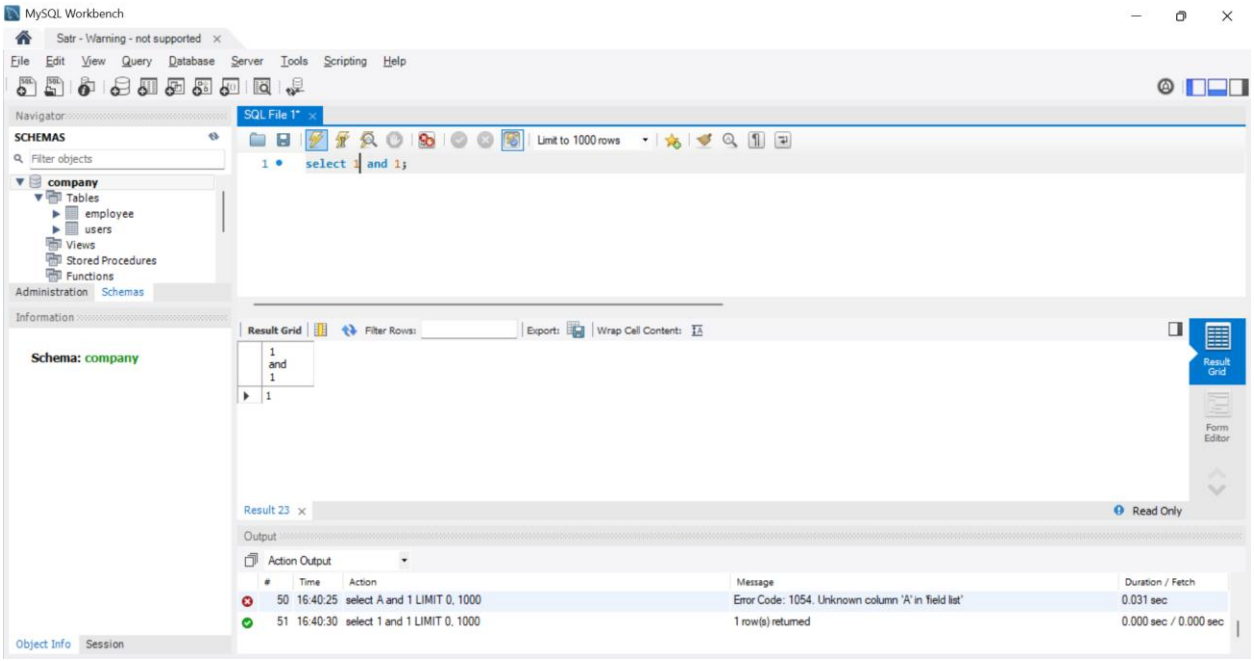


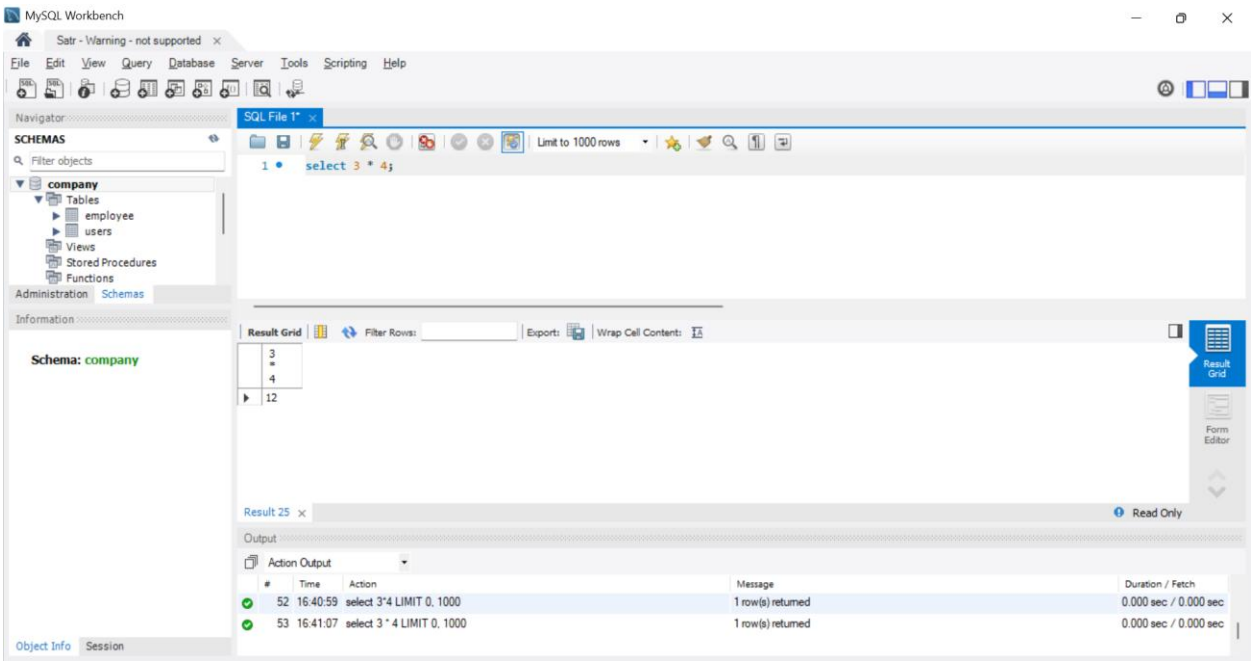
Use AS to rename columns. ✓



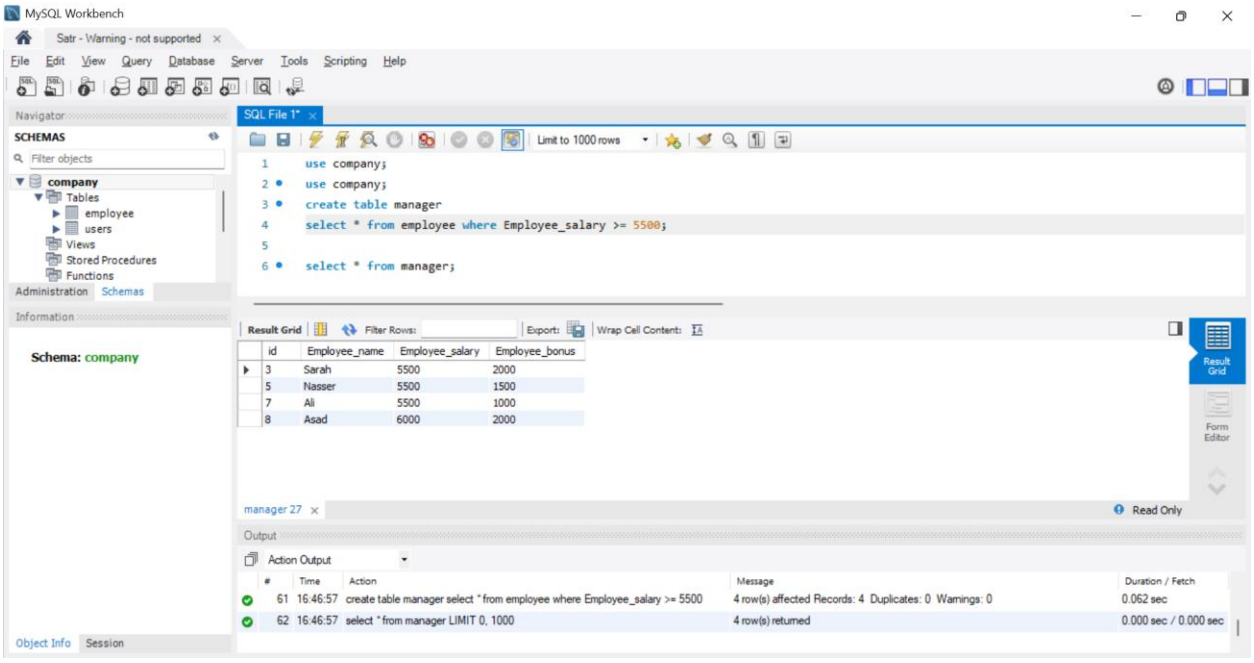
Operators: Comparison (more than, less than, …), Logical (And, Or, …), Arithmetic(+, -, *, …). ✓


MySQL Workbench
Satr - Warning - not supported
File Edit View Query Database Server Tools Scripting Help
Navigator
SCHEMAS
Filter objects
company
Tables
employee
users
Views
Stored Procedures
Functions
Administration Schemas
Information
Table: employee
Columns:
id char(225) PK
Employee_name varchar(225
Employee_salary int
Employee_bonus int
Object Info Session
SQL File 1*
Limit to 1000 rows
1 • select 5 > 3;
Result Grid Filter Rows: Export: Wrap Cell Content:
5 > 3
1
Result Grid
Form Editor
Result 17
Read Only
Output
Action Output
Time Action Message Duration / Fetch
41 16:36:58 select 3 <= 3 LIMIT 0, 1000 1 row(s) returned 0.000 sec / 0.000 sec
42 16:37:16 select 5 > 3 LIMIT 0, 1000 1 row(s) returned 0.000 sec / 0.000 sec

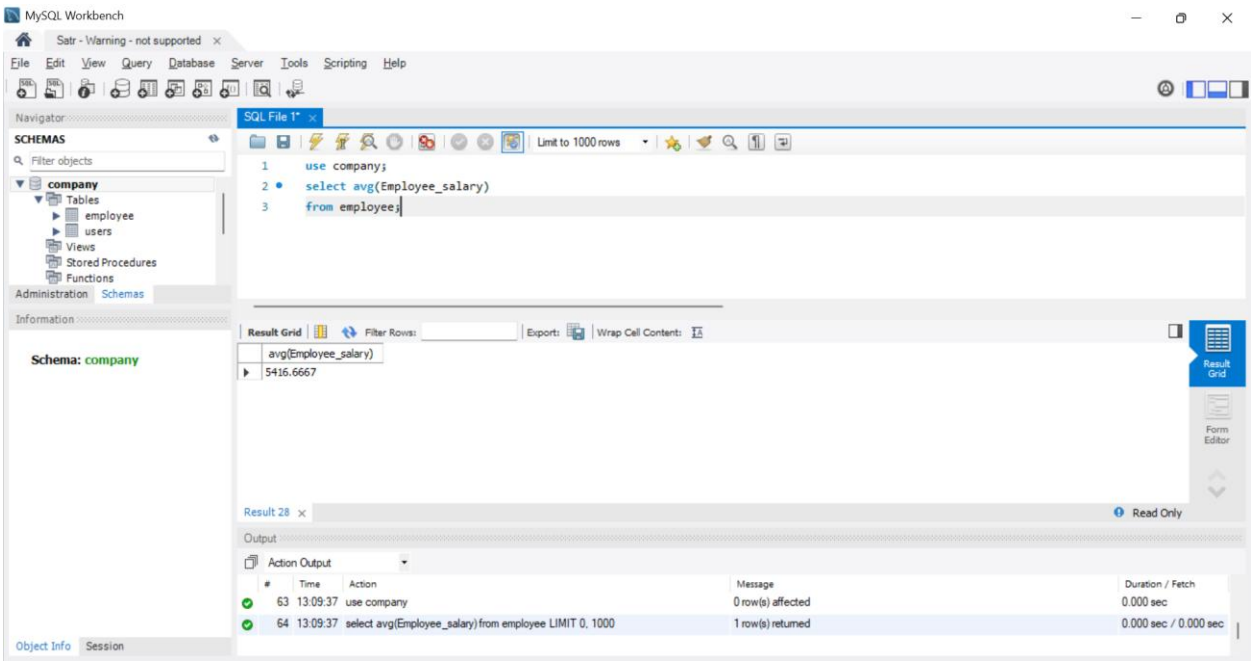

MySQL Workbench
Satr - Warning - not supported
File Edit View Query Database Server Tools Scripting Help
Navigator
SCHEMAS
Filter objects
company
Tables
employee
users
Views
Stored Procedures
Functions
Administration Schemas
Information
Schema: company
Object Info Session
SQL File 1*
Limit to 1000 rows
1 • select 1 and 1;
Result Grid Filter Rows: Export: Wrap Cell Content:
1 and 1
1
Result Grid
Form Editor
Result 23
Read Only
Output
Action Output
Time Action Message Duration / Fetch
50 16:40:25 select A and 1 LIMIT 0, 1000 Error Code: 1054. Unknown column 'A' in 'field list' 0.031 sec
51 16:40:30 select 1 and 1 LIMIT 0, 1000 1 row(s) returned 0.000 sec / 0.000 sec



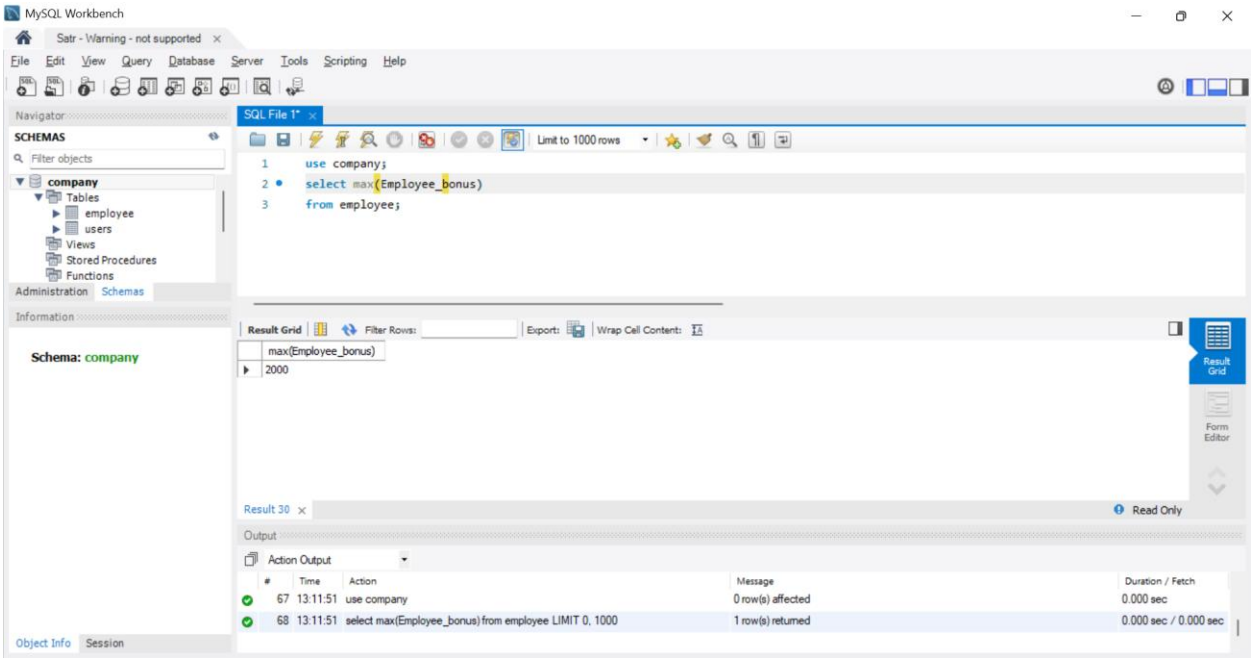
Copy table to new one. ✓



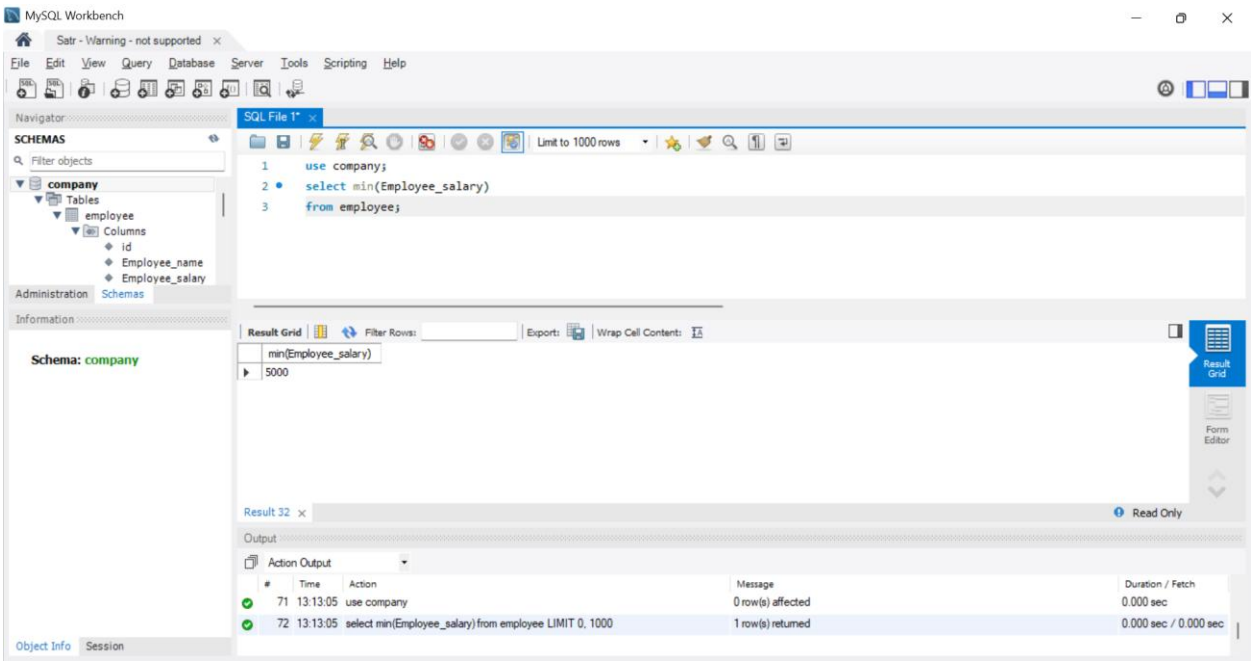
Use aggregate function (avg). ✓



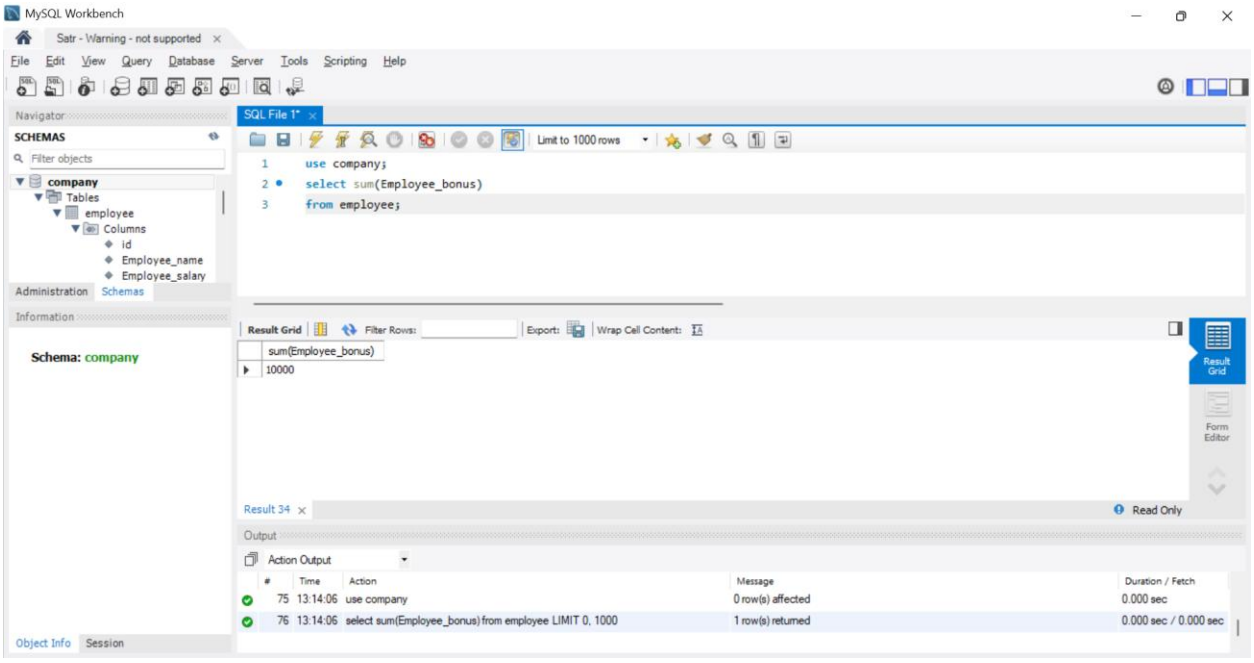
Use aggregate function (max). ✓



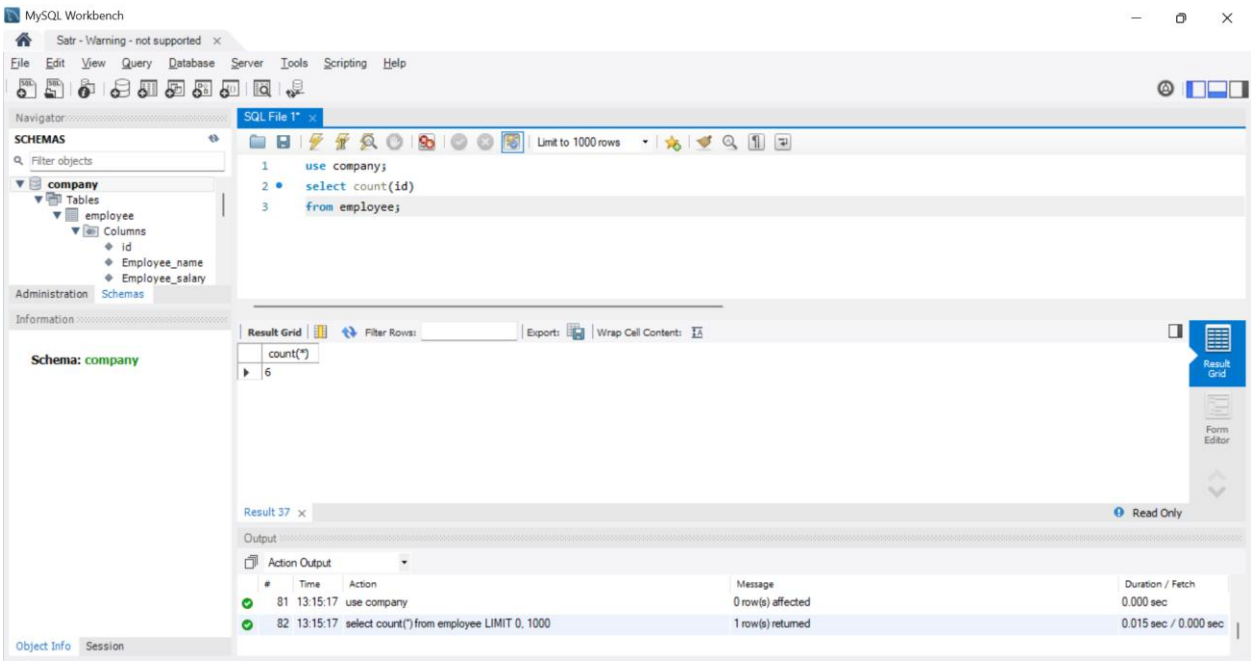
Use aggregate function (min). ✓



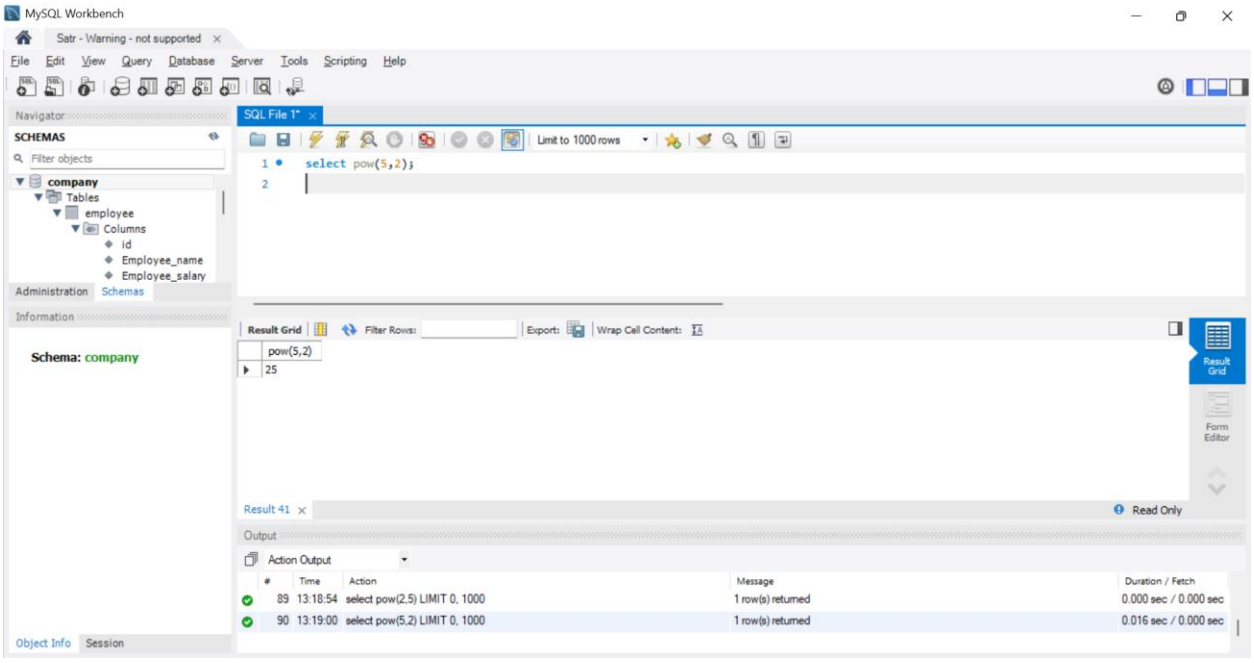
Use aggregate function (sum). ✓



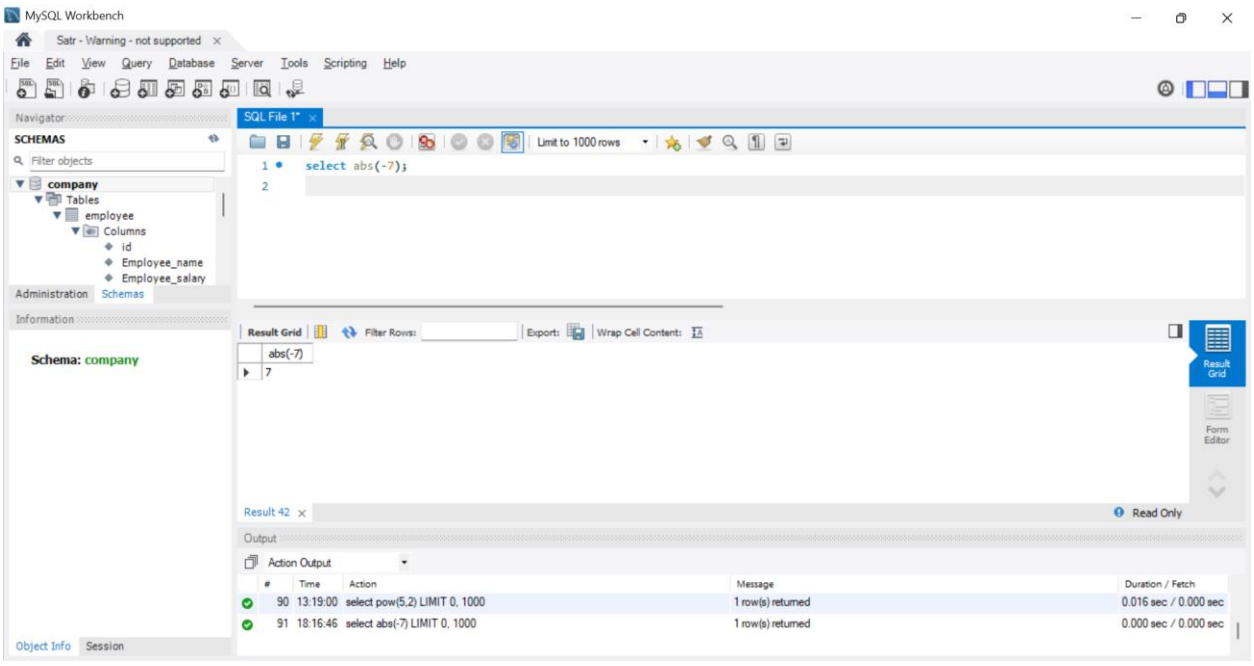
Use aggregate function (count). ✓



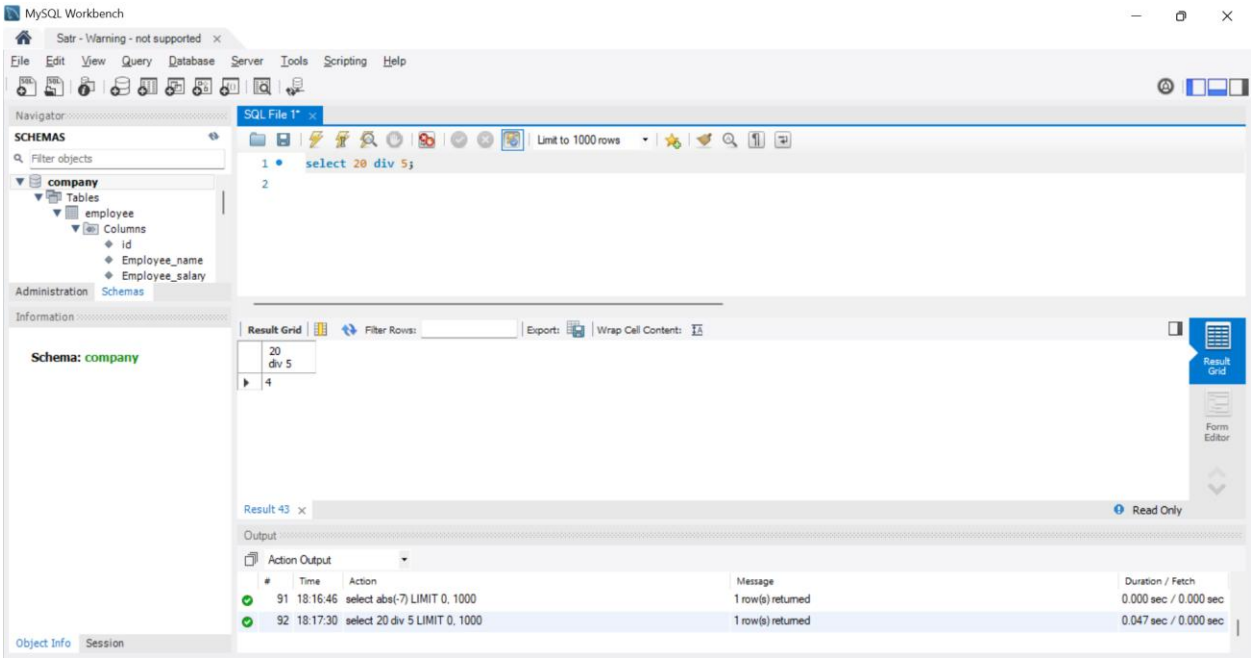
Use Numeric function (pow). ✓



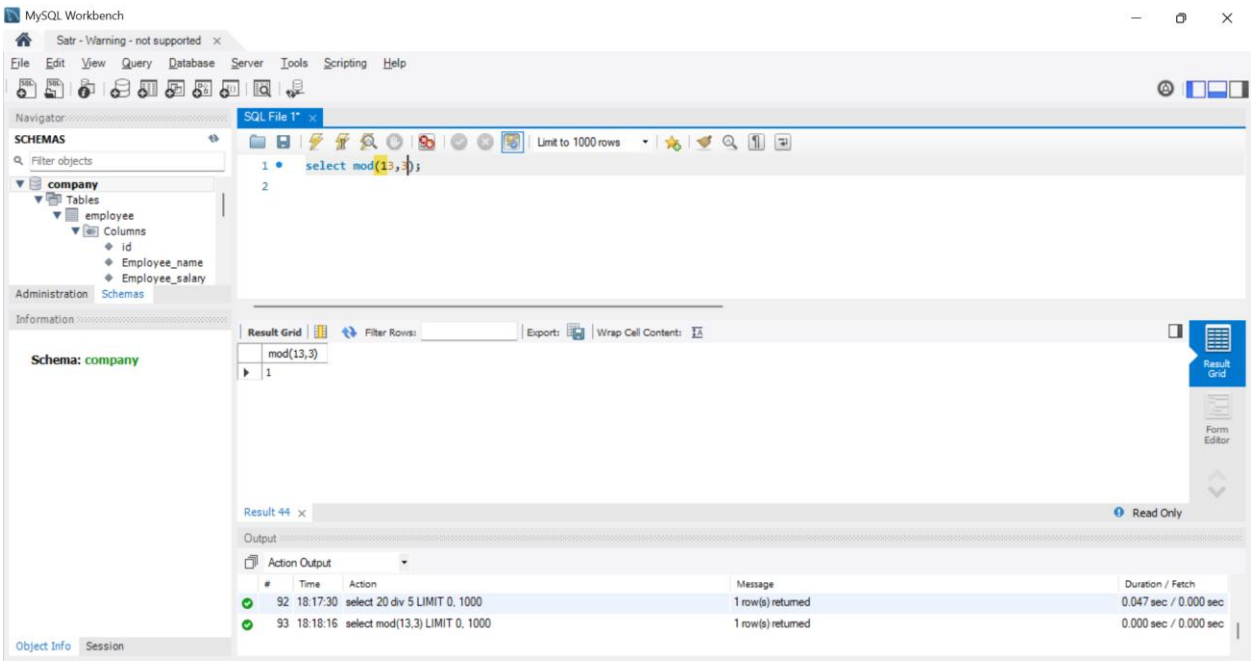
Use Numeric function (abs). ✓



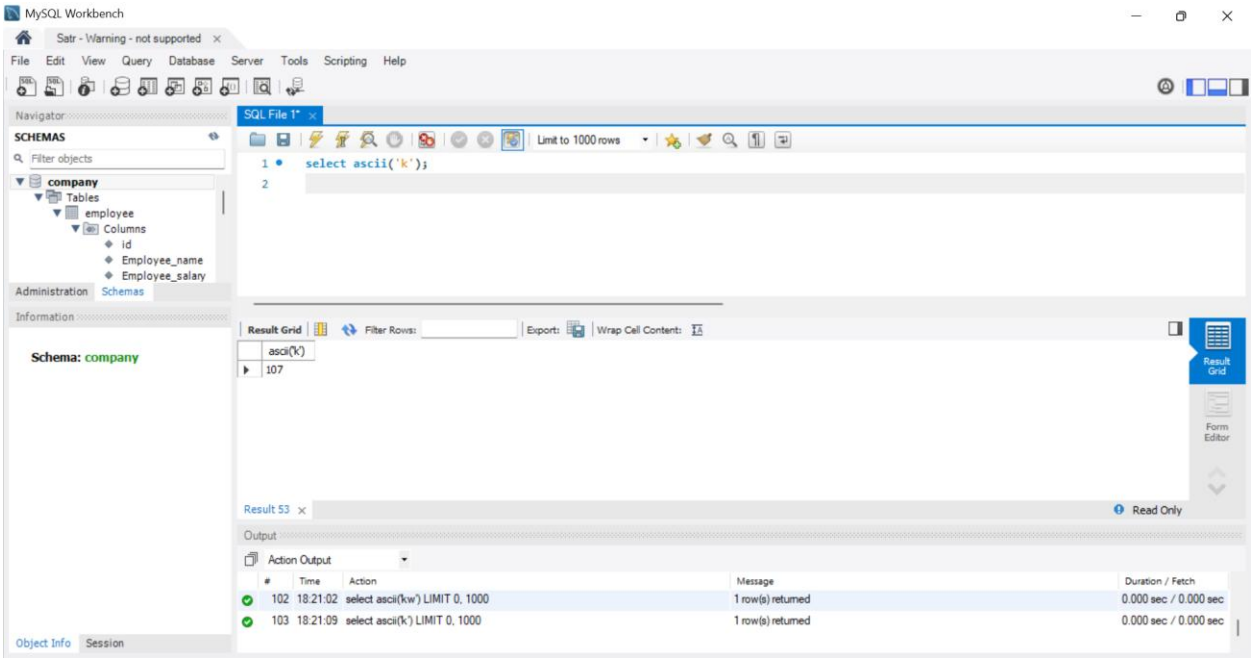
Use Numeric function (div). ✓



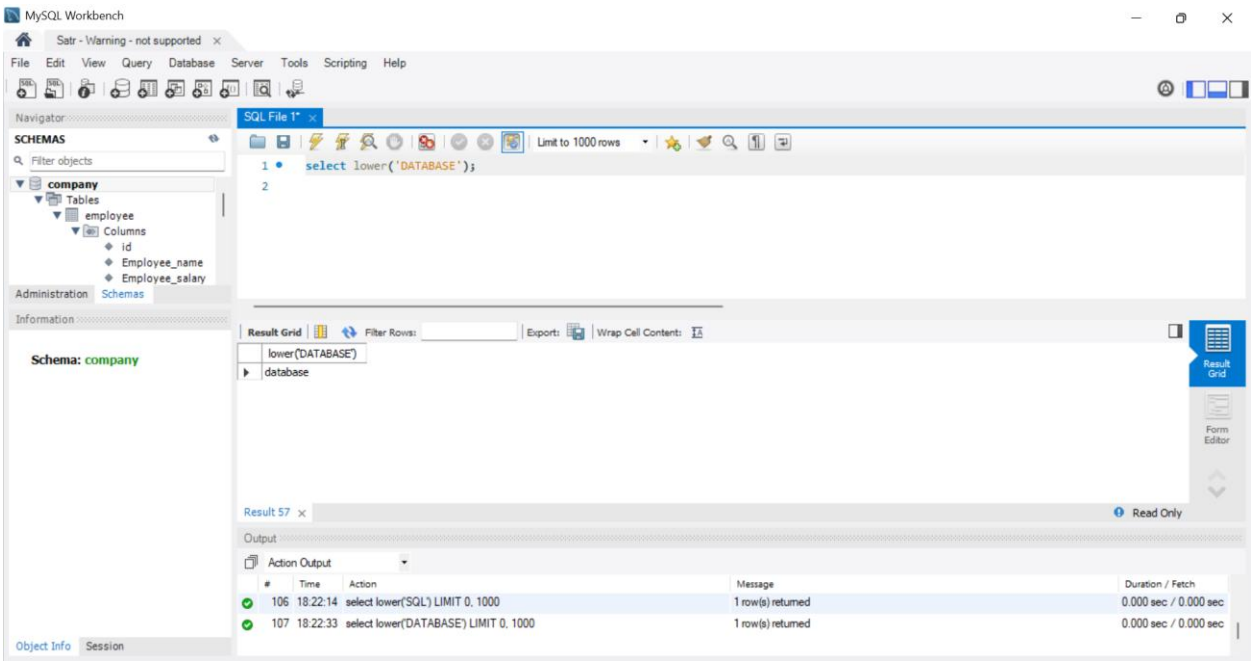
Use Numeric function (mod). ✓



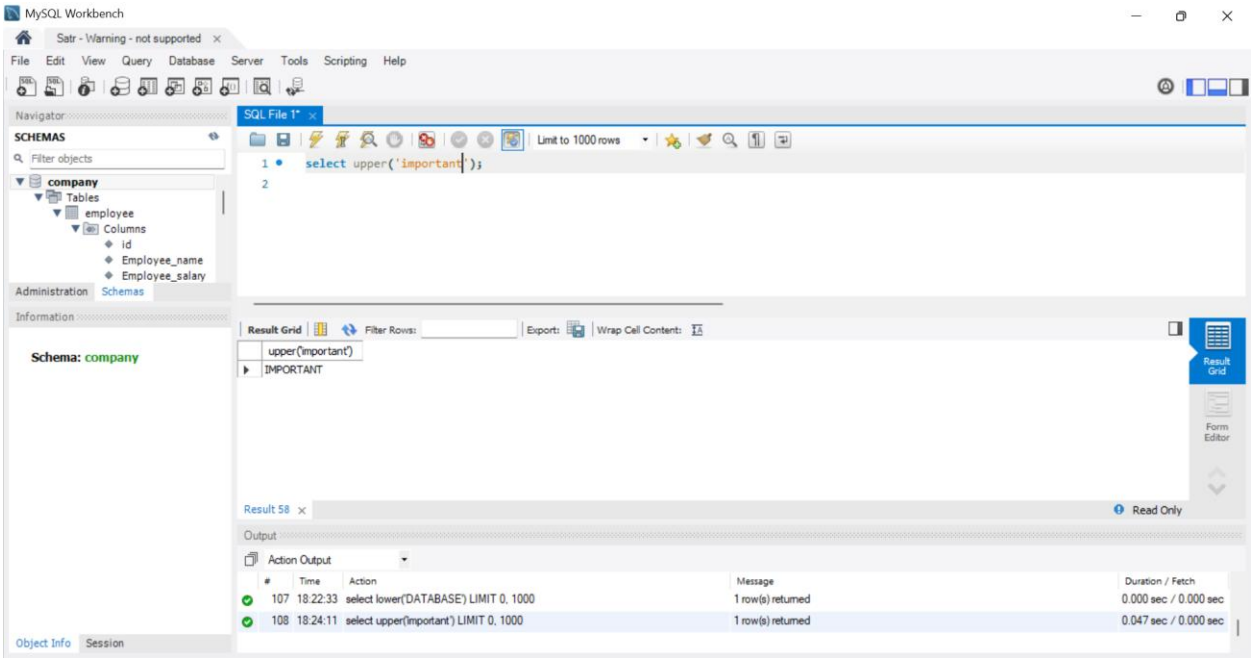
Use string function (ascii). ✓



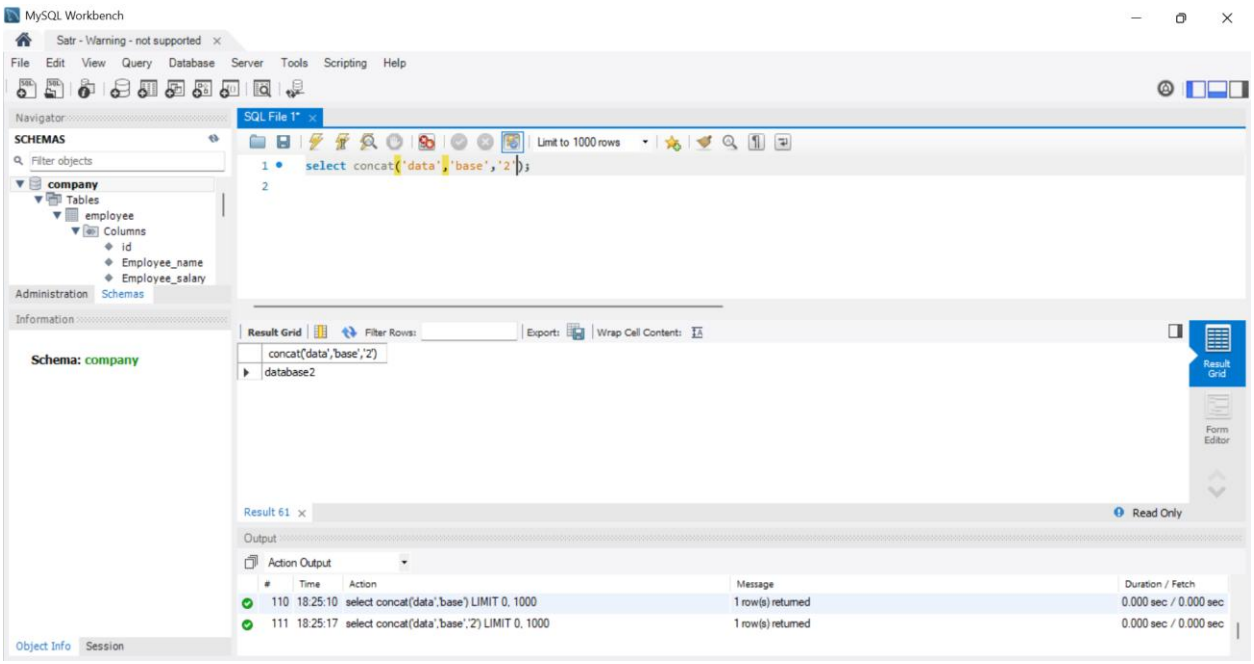
Use string function (lower). ✓



Use string function (upper). ✓



Use string function (concat). ✓



Project:

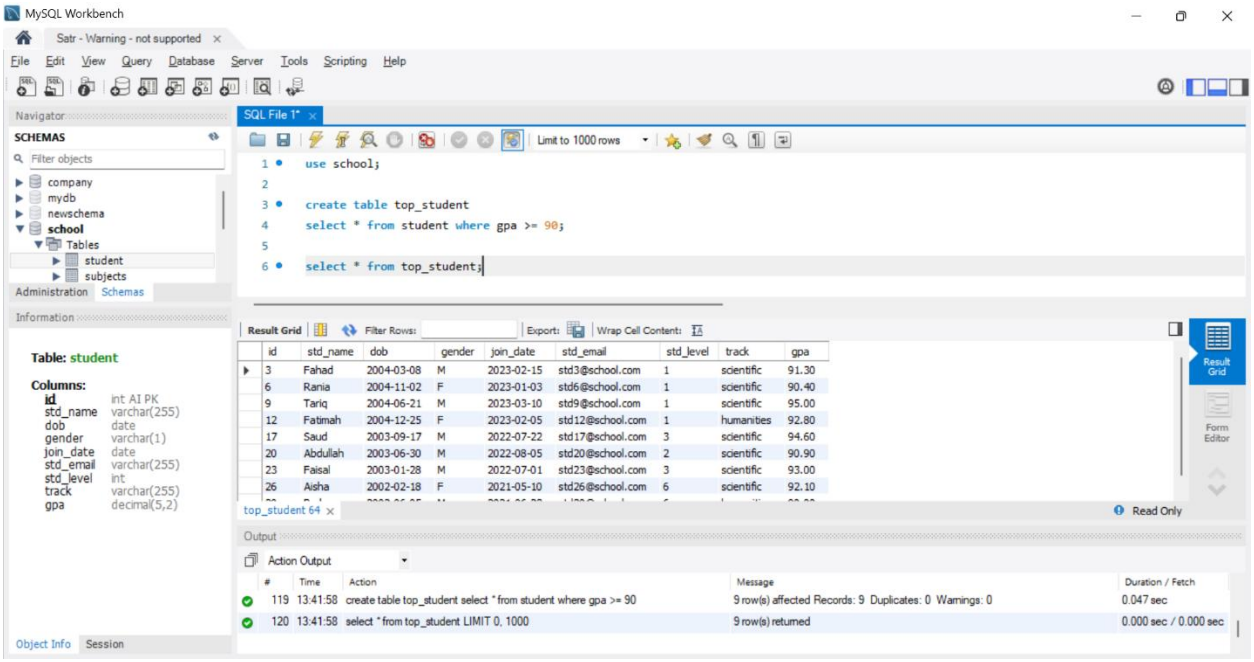
باستخدام ما تعلمته خلال هذهِ الدورة قم بتطبيق المتطلبات التالية، علما أن هذا المشروع مكمّل لمشروع SQL المستوى الأول.

المتطلبات:

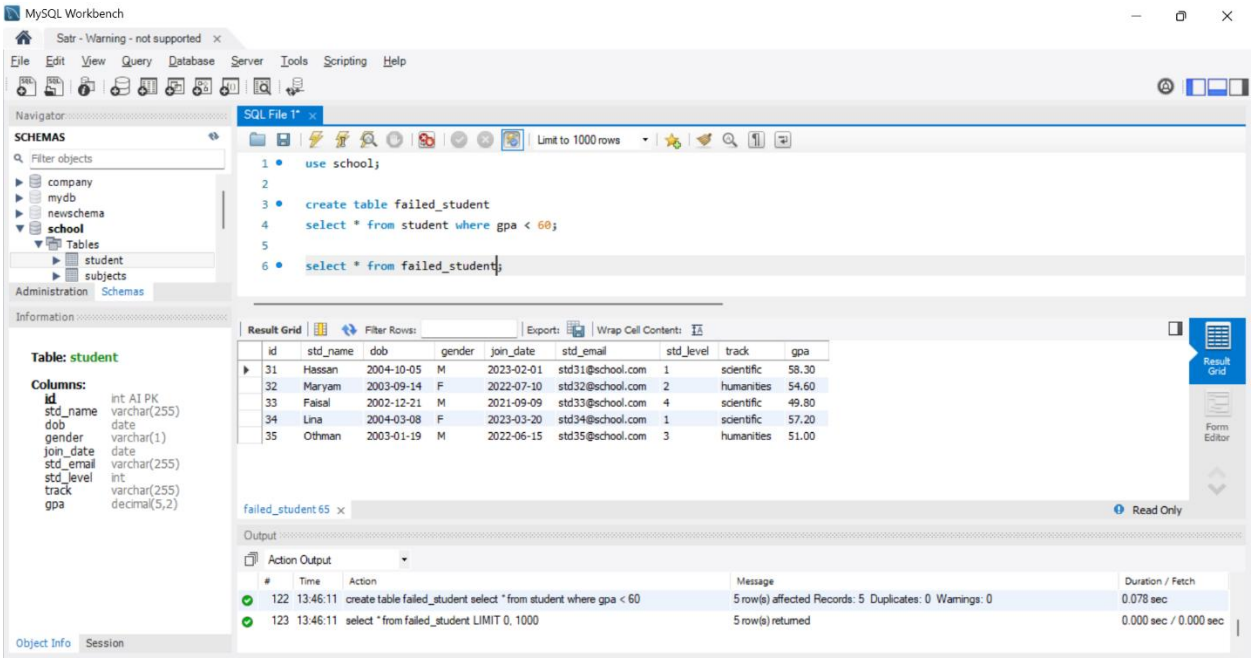
- إنشاء جدول للطلاب المتفوقين من جدول الطلاب، بحيث يحتوي هذا الجدول على بيانات الطلاب الذي يكون معدلهم التراكمي أعلى من ٩٠.
- إنشاء جدول للطلاب الغير مجتازين من جدول الطلاب، بحيث يحتوي هذا الجدول على بيانات الطلاب الذي يكون معدلهم التراكمي أقل من ٦٠.
- عرض أسماء الطلاب التي تبدأ بحرف A.
- عرض أسماء الطلاب التي تحتوي أسمائهم على أربع خانات.
- تطبيق Aggregate functions (AVG, MAX, MIN) على المعدل التراكمي للطالب مع إضافة تسمية واضحة للناتج.
- حصر وعرض أسماء الطلاب المتفوقين في المستوى السادس الحاصلين على معدل تراكمي يساوي 100.
- عرض الطلاب اللذين في المستوى الأول وأعمارهم بين ١٥ و ١٦ سنة.
- 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.

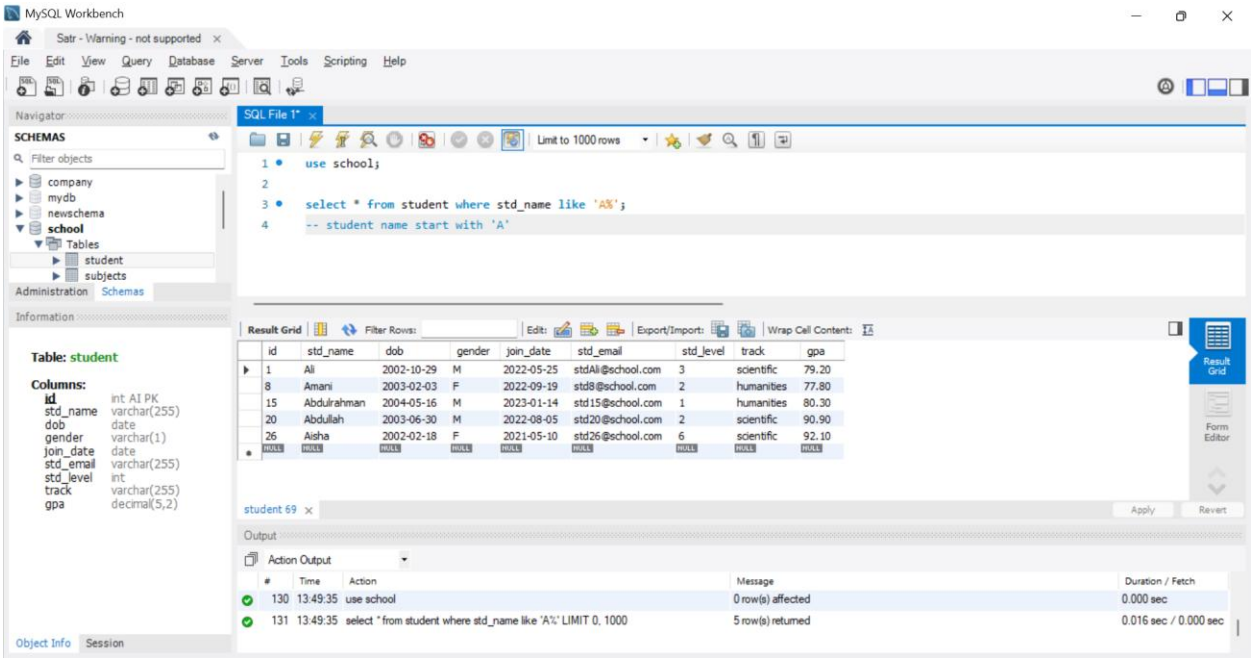
Create top student table. ✓



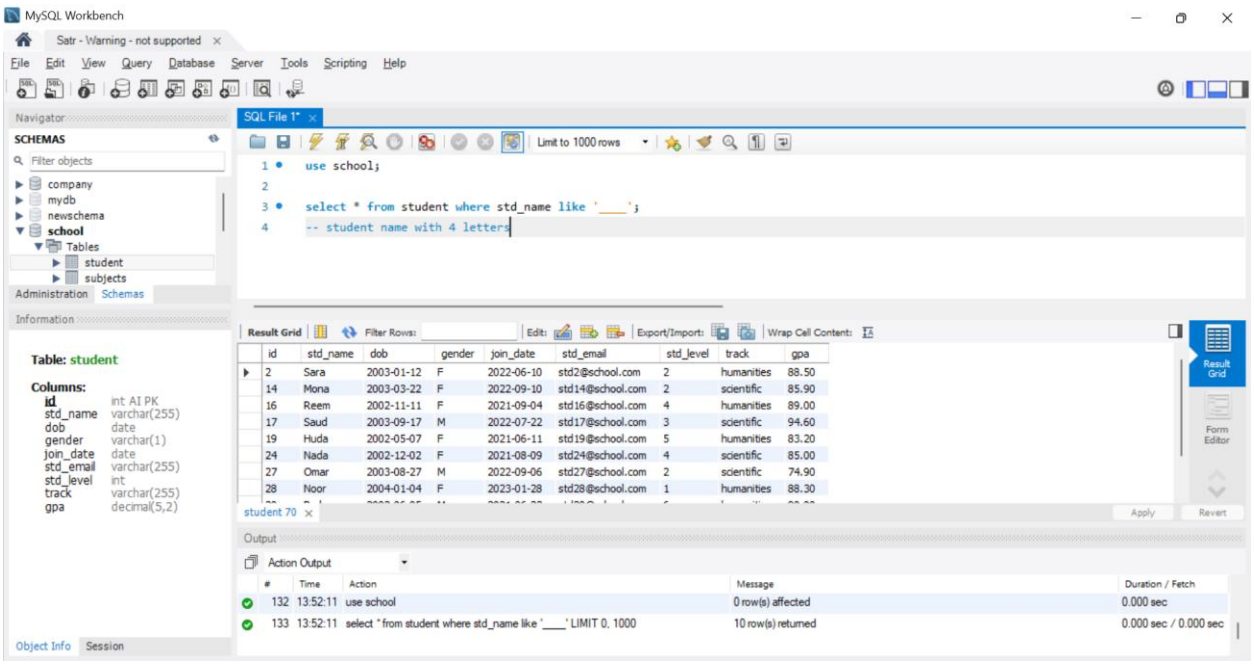
Create failed student table. ✓



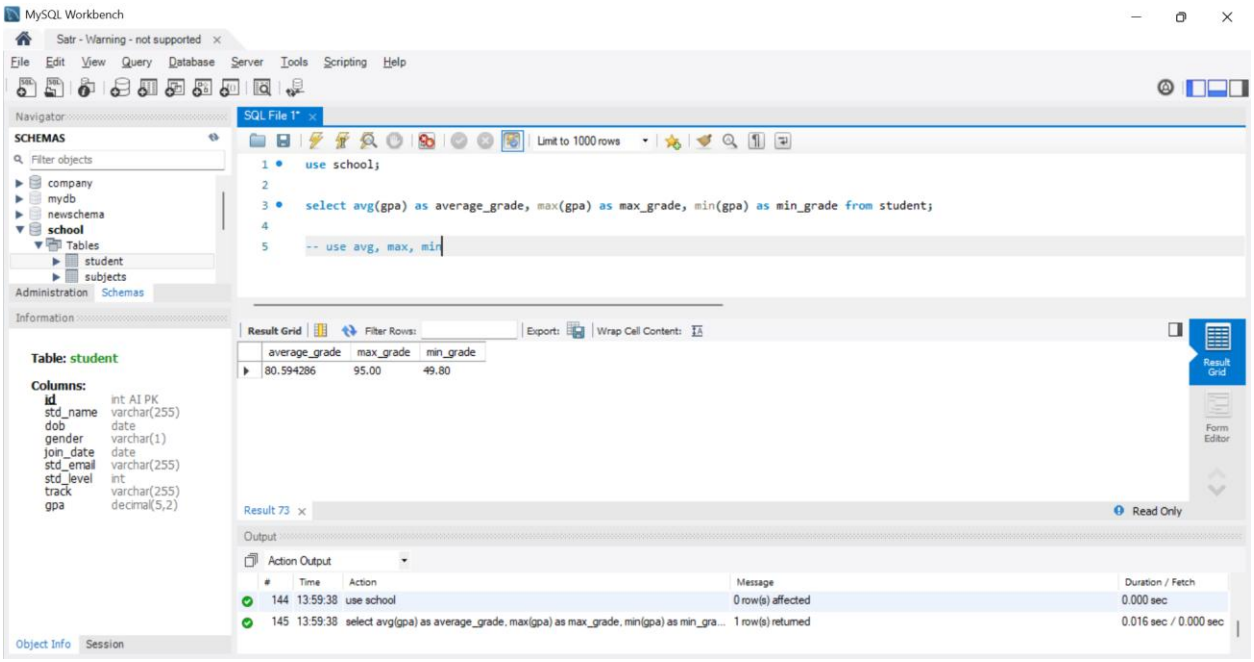
Select students start with ‘A’ in their name. ✓



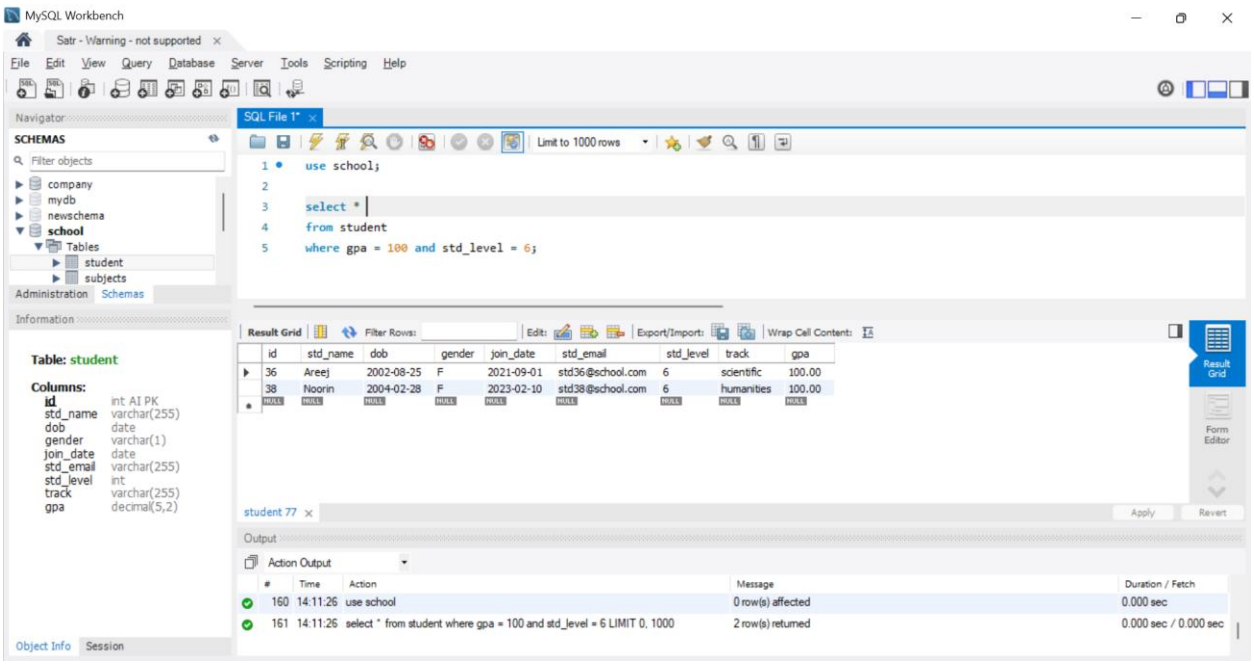
Select only students that have 4 letters in their name. ✓



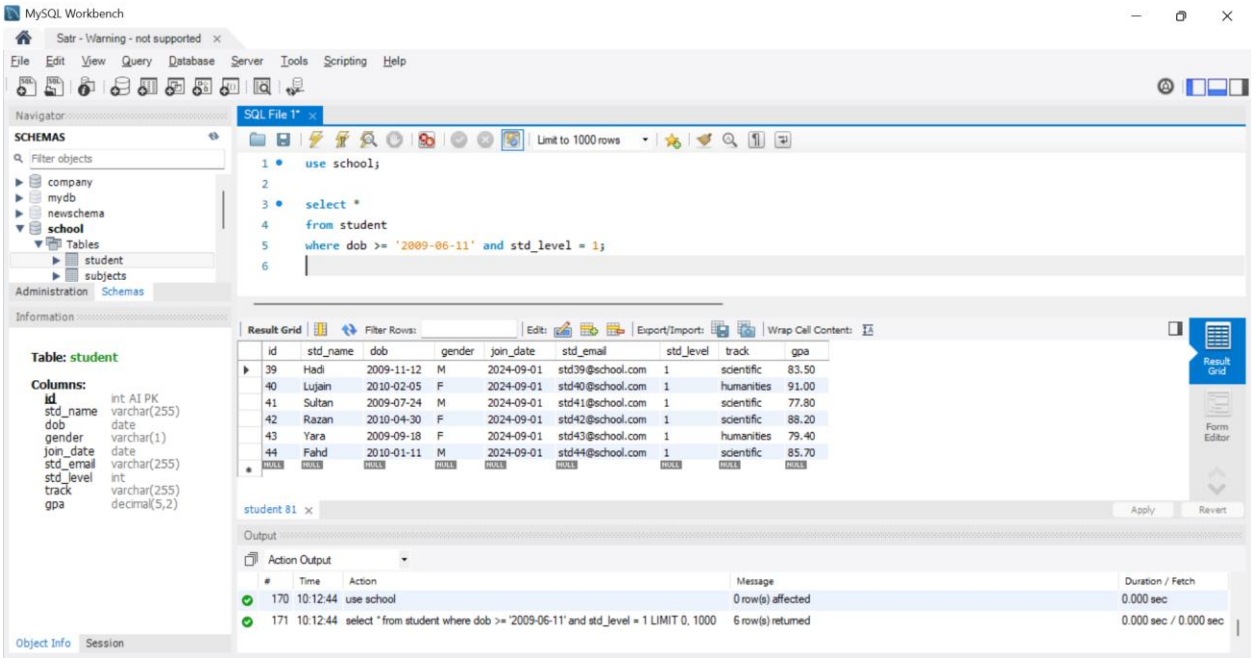
Apply AVG, MAX, MIN (Aggregate functions) to the student's GPA and add a clear label to the result. ✓



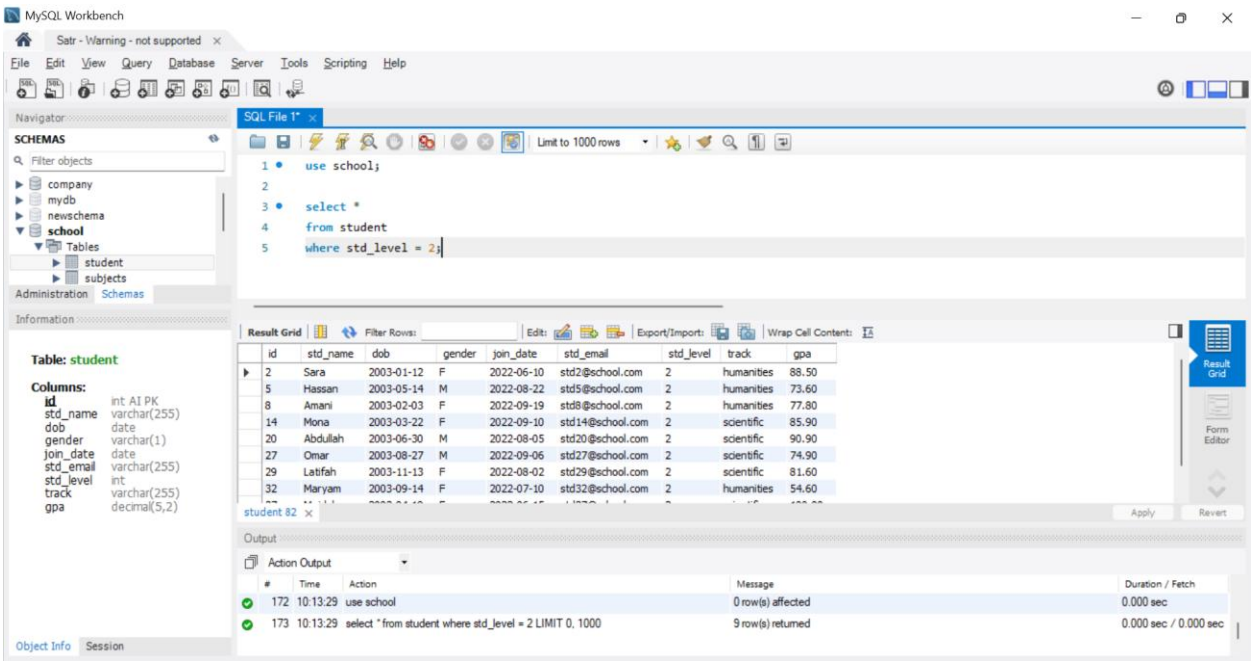
List and display the names of outstanding students in the sixth level who have a cumulative average equal to 100. ✓



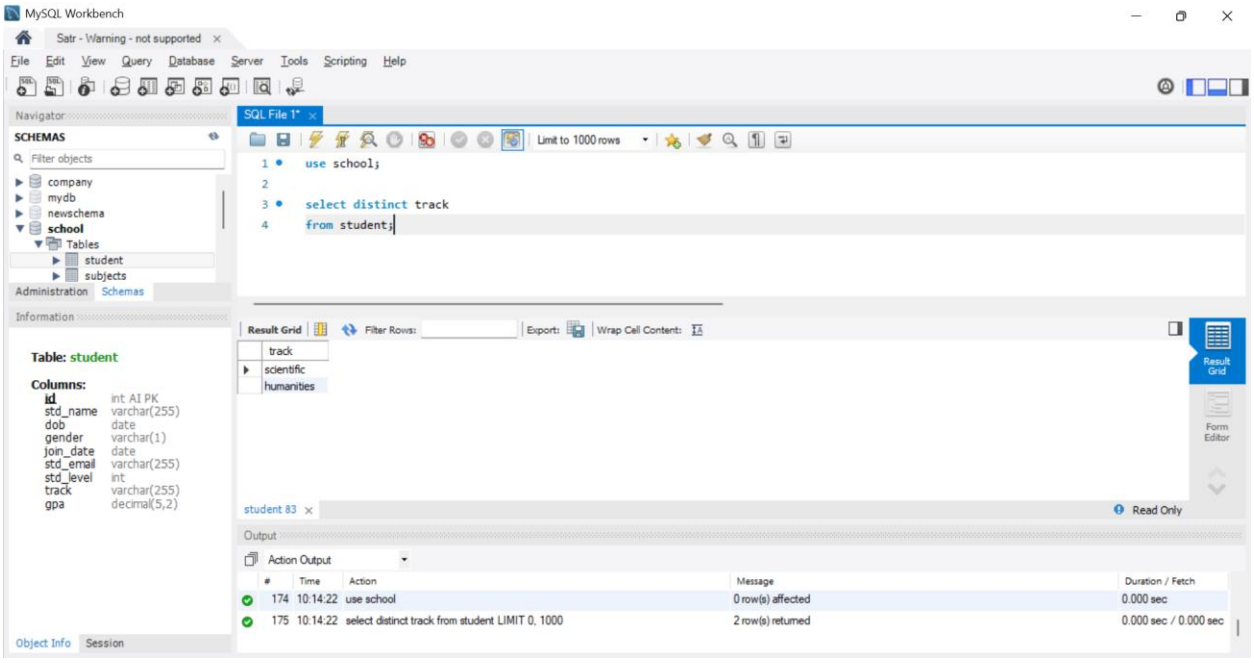
Show students who are in the first level and are between 15 and 16 years old. ✓



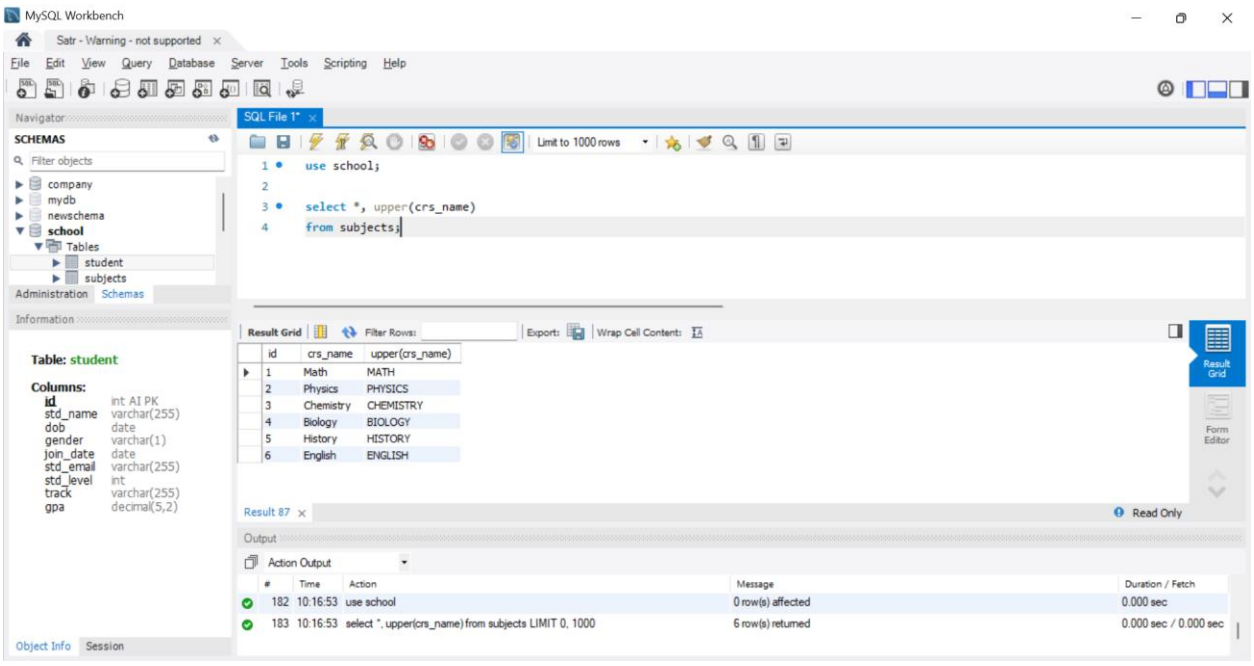
Display the number of students in Level 2. ✓



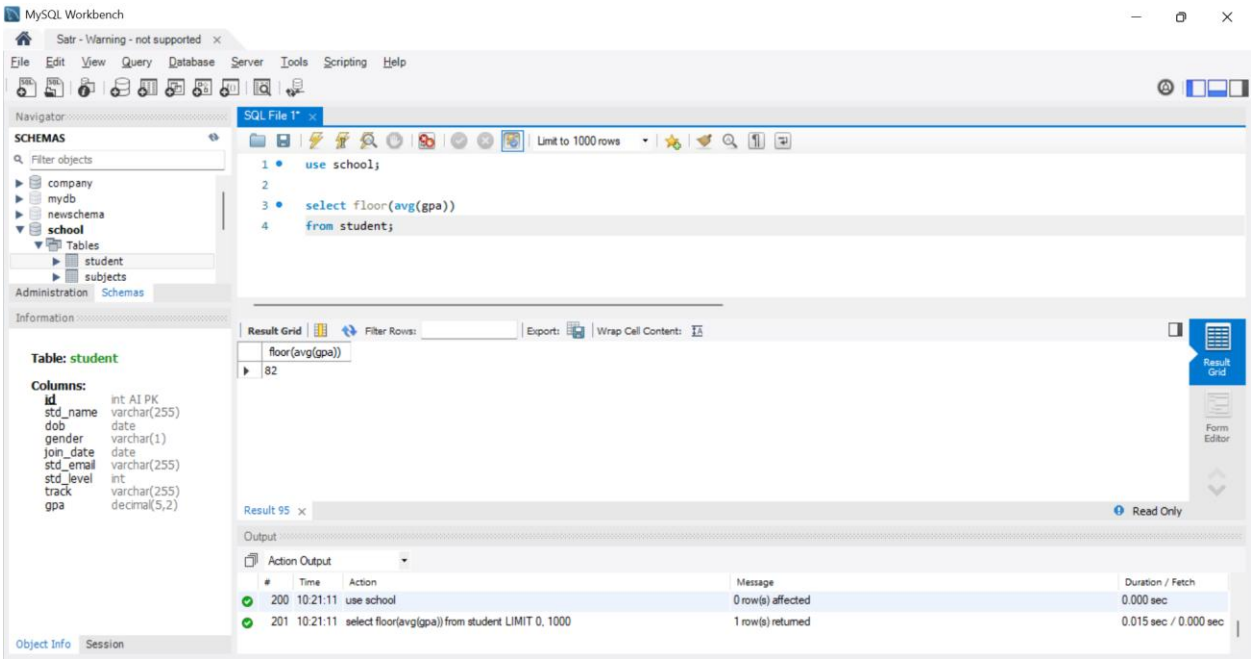
Review students' paths in school without repetition. ✓



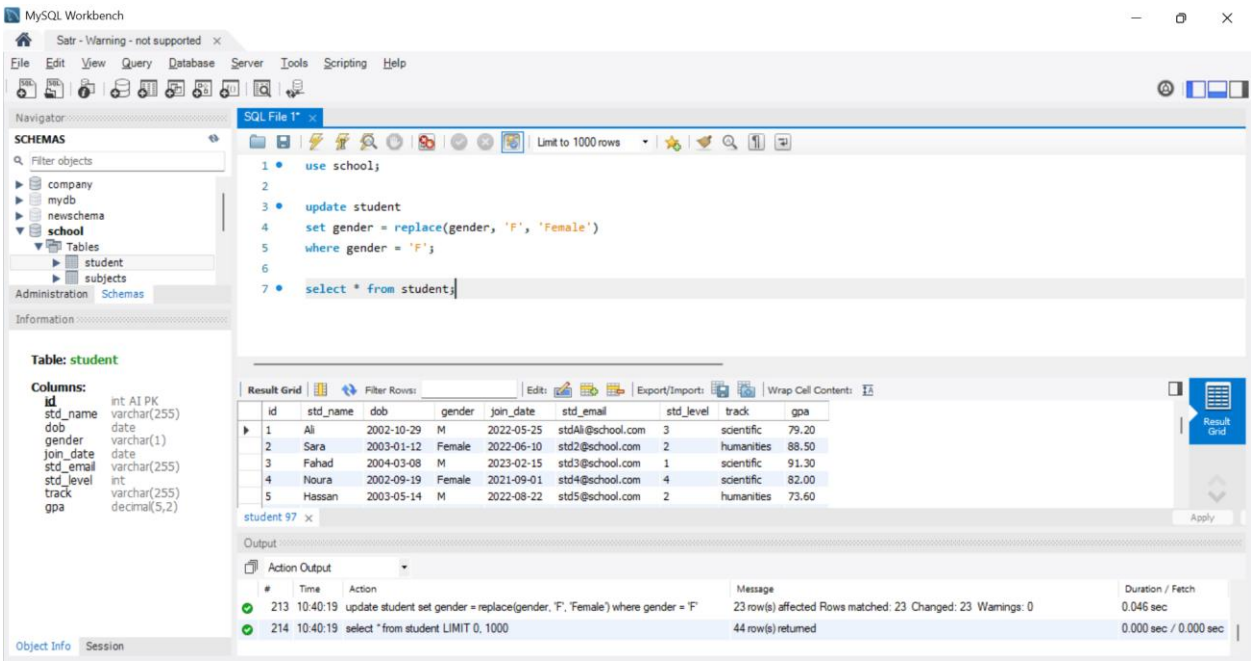
Subjects names are displayed and words are displayed in capital letters. ✓

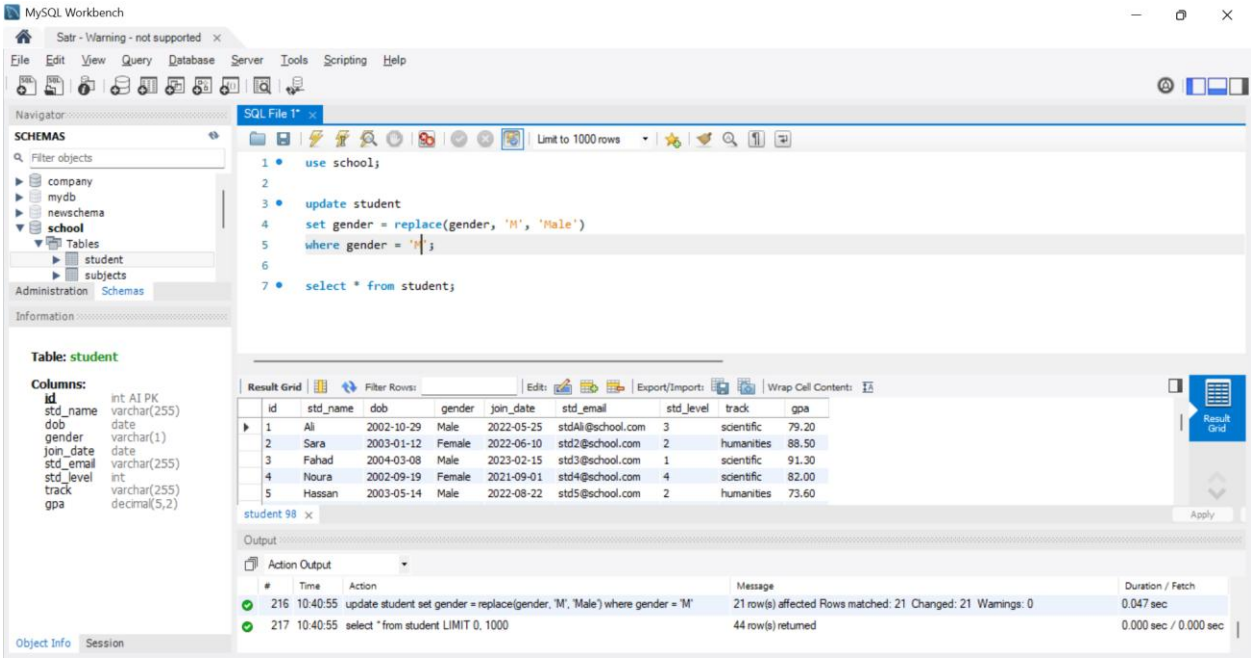


Display the arithmetic mean of the GPA and round the number to the smallest number (using numeric functions). ✓

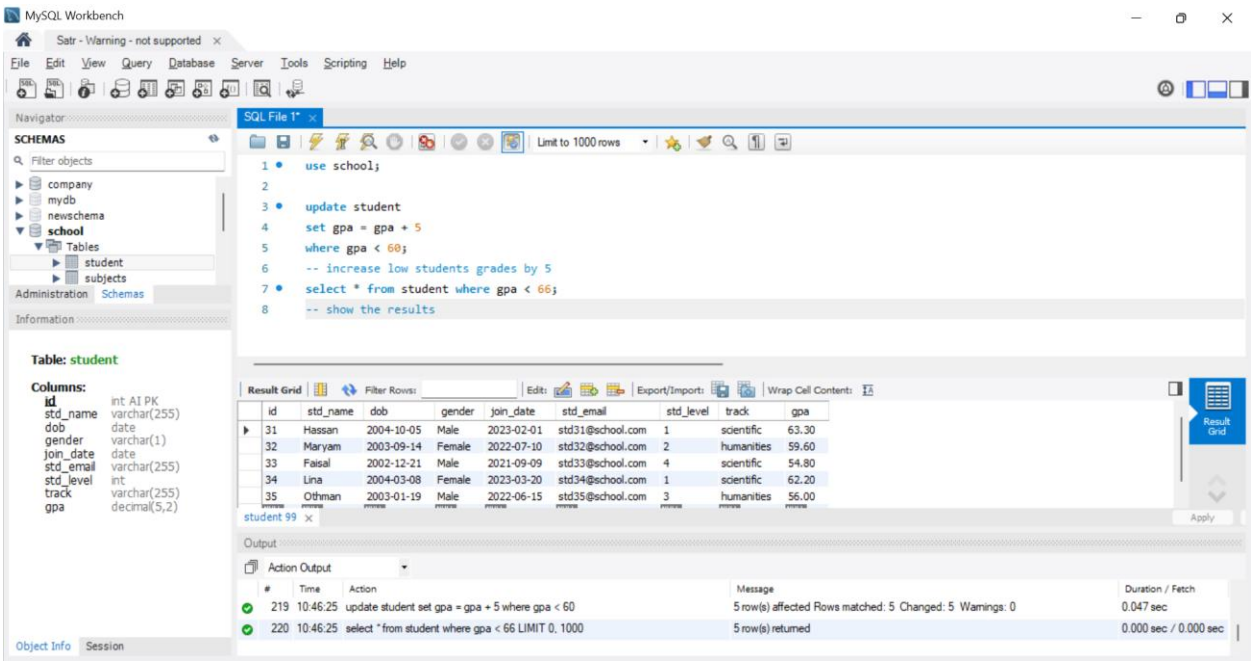


Switch all rows from the Students table that have gender F to Female, and M to Male (using string functions). ✓





Update the cumulative GPA for students whose cumulative GPA is less than 60 and increase their GPA by five grades. ✓



Project done. ✓