

Student ID Reference

MySQL Workbench

Migration x Test2 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

blueberryapple
databaseproject
Tables
assignment
course
department
distribution
enrollment
grades
student
Administration Schemas

Information

Table: **grades**

Columns:
student_id int PK
assignment_id int PK
earned_points int

Query 1 student

1 • SELECT * FROM databaseproject.student;

Result Grid

student_id	f_name	l_name	major
6	Sophia	Jones	History
7	Daniel	Brown	Biology
8	Olivia	Davis	Chemistry
9	William	Miller	History
10	Emma	Wilson	Biology
11	Alexan...	Martinez	Chemistry
12	Mia	Taylor	History
13	Quincy	Quinn	Computer Science
* RULES	* RULES	* RULES	* RULES

student 1 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
78	20:59:12	SELECT MAX(earned_points) AS highest_score FROM databaseproject.grad...	1 row(s) returned	0.000 sec / 0.000 sec
79	21:00:32	SELECT MAX(earned_points) AS highest_score FROM databaseproject.grad...	1 row(s) returned	0.016 sec / 0.000 sec
80	22:09:34	SELECT * FROM databaseproject.student LIMIT 0, 1000	13 row(s) returned	0.016 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.

Course ID Reference

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Information

Table: **course**

Columns:
course_id int PK
name varchar
course_name varchar
semester int
department_id int
course_number int
year int

Query 1 student grades assignment course

1 • SELECT * FROM databaseproject.course;

Result Grid

course_id	name	course_name	semester	department_id	course_number	year
101	CS101	Introduction to Computer Science	Fall	1	101	2023
102	MATH201	Calculus I	Spring	2	201	2024
103	PHY301	Mechanics	Fall	3	301	2023
104	BIO101	Introduction to Biology	Fall	4	101	2023
105	CHEM201	Organic Chemistry	Spring	5	201	2024
106	HIST301	World History	Fall	6	301	2023
* RULES	* RULES	* RULES	* RULES	* RULES	* RULES	* RULES

course 1 x

Output

SQLAdditions

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SQL Code To be Executed

The screenshot shows the MySQL Workbench interface. On the left, the 'SCHEMAS' pane displays a tree view of the database structure, including tables like 'assignment', 'course', 'department', 'distribution', 'enrollment', 'grades', and 'student'. The 'grades' table is selected, and its columns are listed: 'student_id' (int PK), 'assignment_id' (int PK), and 'earned_points' (int). The main editor displays a SQL query labeled 'Query 1' with the following code:

```
1  -- Compute the grade for a student
2  SELECT s.student_id,
3         s.f_name,
4         s.l_name,
5         SUM(g.earned_points) AS total_earned_points,
6         SUM(a.total_points) AS total_possible_points,
7         (SUM(g.earned_points) / SUM(a.total_points)) * 100 AS grade_percentage
8  FROM databaseproject.Student s
9  INNER JOIN databaseproject.Grades g ON s.student_id = g.student_id
10 INNER JOIN databaseproject.Assignment a ON g.assignment_id = a.assignment_id
11 WHERE s.student_id = target_student_id
12       AND a.course_id = target_course_id
13 GROUP BY s.student_id, s.f_name, s.l_name;
```

On the right, the 'SQLAdditions' pane shows a message: 'Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.'

Test Case w/ Result #1

MySQL Workbench

Migration x Test2 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

blueben

databas

Table

Table: grades

Columns:

student_id

assignment_id

earned_points

Query 1 x student grades

```
1 -- Compute the grade for a student
2 SELECT s.student_id,
3       s.f_name,
4       s.l_name,
5       SUM(g.earned_points) AS total_earned_points,
6       SUM(a.total_points) AS total_possible_points,
7       (SUM(g.earned_points) / SUM(a.total_points)) * 100 AS grade_percentage
8 FROM databaseproject.Student s
9 INNER JOIN databaseproject.Grades g ON s.student_id = g.student_id
10 INNER JOIN databaseproject.Assignment a ON g.assignment_id = a.assignment_id
11 WHERE s.student_id = 1
12 AND a.course_id = 101
13 GROUP BY s.student_id, s.f_name, s.l_name;
```

Result Grid

student_id	f_name	l_name	total_earned_points	total_possible_points	grade_percentage
1	John	Doe	399	460	86.7391

Result 57 x

Read Only Context Help Snippets

SQLAdditions

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Test Case w/Result #2

MySQL Workbench

Migration x Test2 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

blueben

databas

Table

Table: grades

Columns:

student_id

assignment_id

earned_points

Query 1 x student grades

```
1 -- Compute the grade for a student
2 SELECT s.student_id,
3       s.f_name,
4       s.l_name,
5       SUM(g.earned_points) AS total_earned_points,
6       SUM(a.total_points) AS total_possible_points,
7       (SUM(g.earned_points) / SUM(a.total_points)) * 100 AS grade_percentage
8 FROM databaseproject.Student s
9 INNER JOIN databaseproject.Grades g ON s.student_id = g.student_id
10 INNER JOIN databaseproject.Assignment a ON g.assignment_id = a.assignment_id
11 WHERE s.student_id = 2
12 AND a.course_id = 102
13 GROUP BY s.student_id, s.f_name, s.l_name;
```

Result Grid

student_id	f_name	l_name	total_earned_points	total_possible_points	grade_percentage
2	Jane	Smith	74	300	24.6667

Result 58 x

Read Only Context Help Snippets

SQLAdditions

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Test Case Result #3

MySQL Workbench

Migration x Test2 x

File Edit View Query Database Server Tools Scripting Help

Navigator: student grades

SCHEMAS

Filter objects

blueben

databas

Table

Administr

Information

Table: grades

Columns:

student_id

assignment_id

earned_points

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

Result 59 x

Read Only Context Help Snippets

```
1 -- Compute the grade for a student
2 SELECT s.student_id,
3        s.f_name,
4        s.l_name,
5        SUM(g.earned_points) AS total_earned_points,
6        SUM(a.total_points) AS total_possible_points,
7        (SUM(g.earned_points) / SUM(a.total_points)) * 100 AS grade_percentage
8 FROM databaseproject.Student s
9 INNER JOIN databaseproject.Grades g ON s.student_id = g.student_id
10 INNER JOIN databaseproject.Assignment a ON g.assignment_id = a.assignment_id
11 WHERE s.student_id = 3
12 AND a.course_id = 103
13 GROUP BY s.student_id, s.f_name, s.l_name;
```

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

student_id	f_name	l_name	total_earned_points	total_possible_points	grade_percentage
3	David	Brown	130	400	32.5000