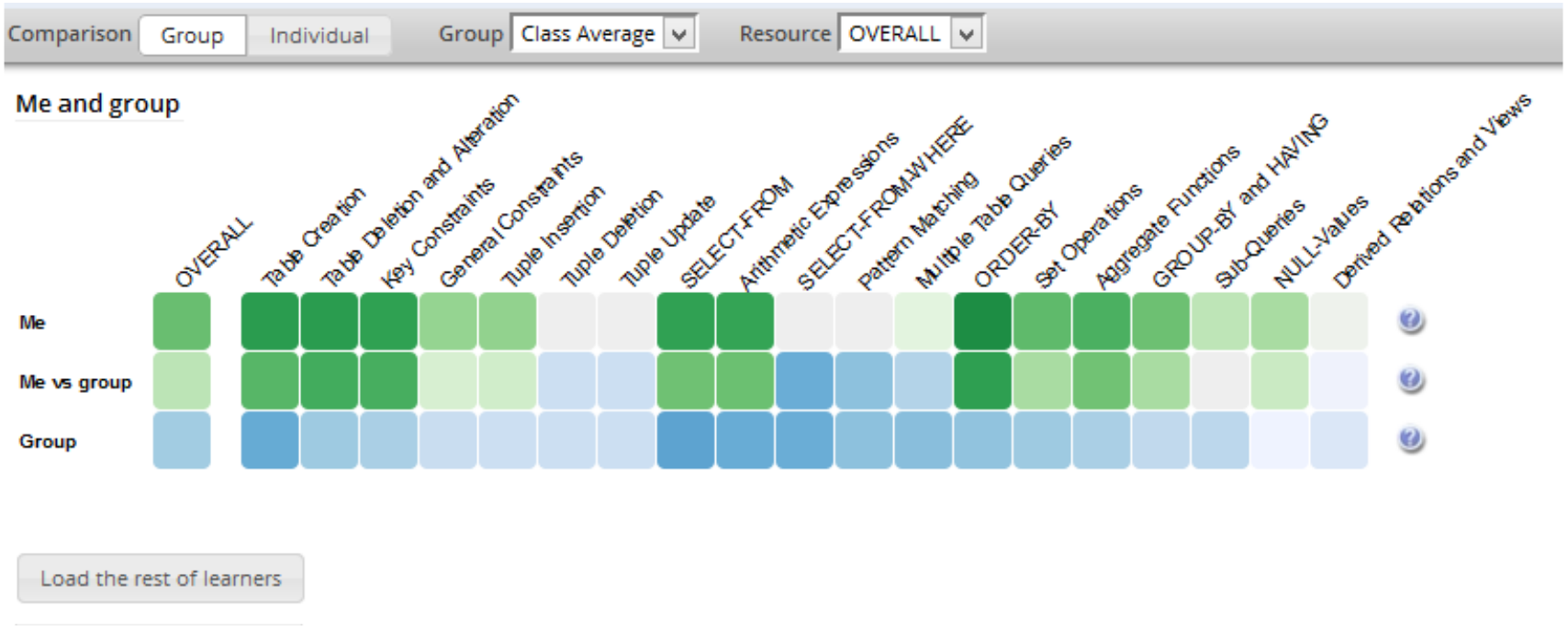
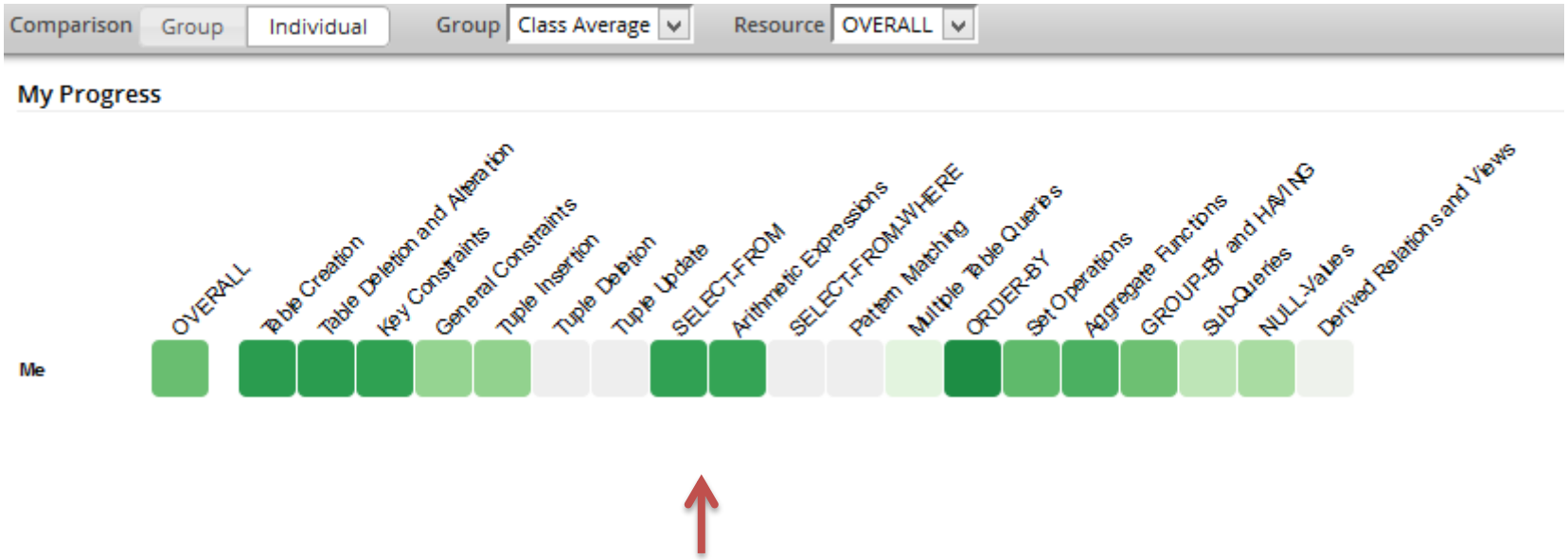
Mastery Grids
User Manual

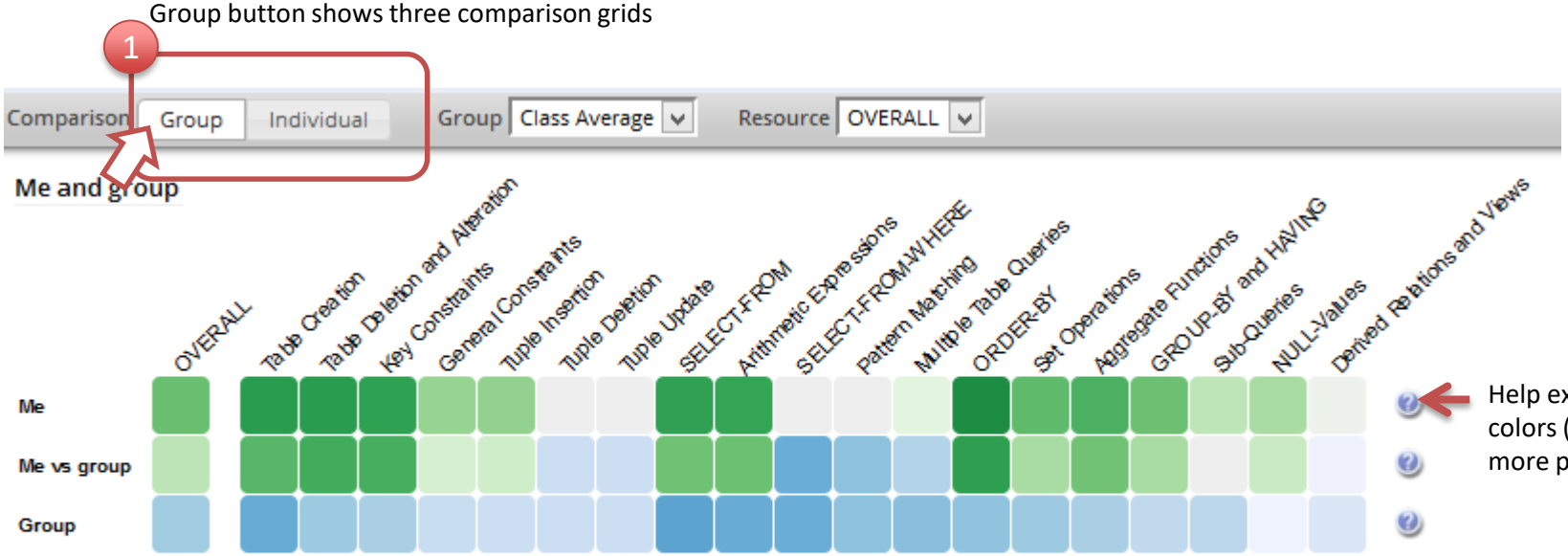
PAWS Lab
School of Computing and Information
University of Pittsburgh





This tool is a visualization of your progress in different topics. Darker means more progress

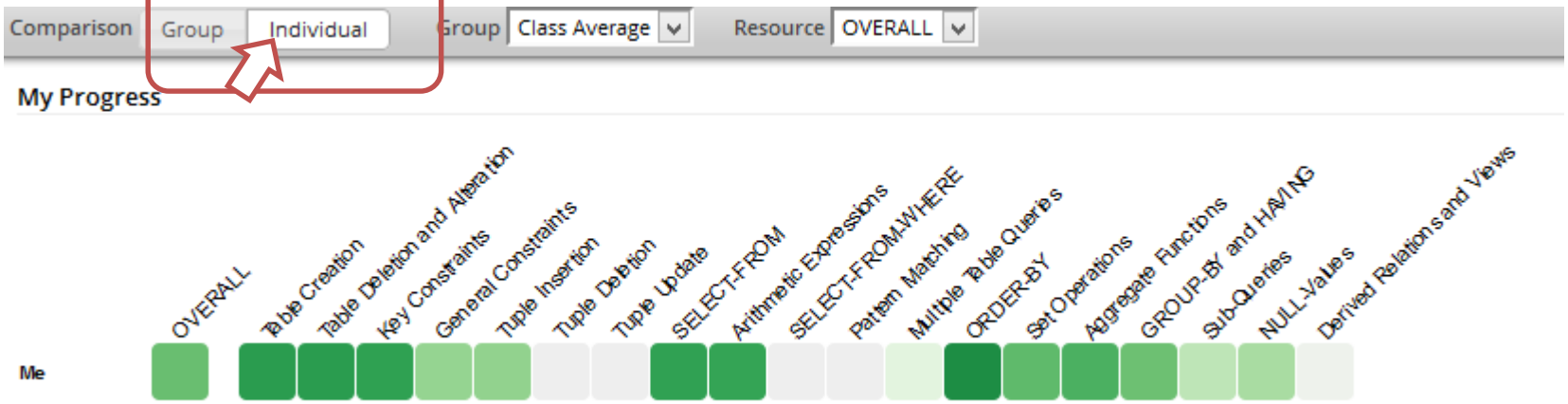
Group button shows three comparison grids



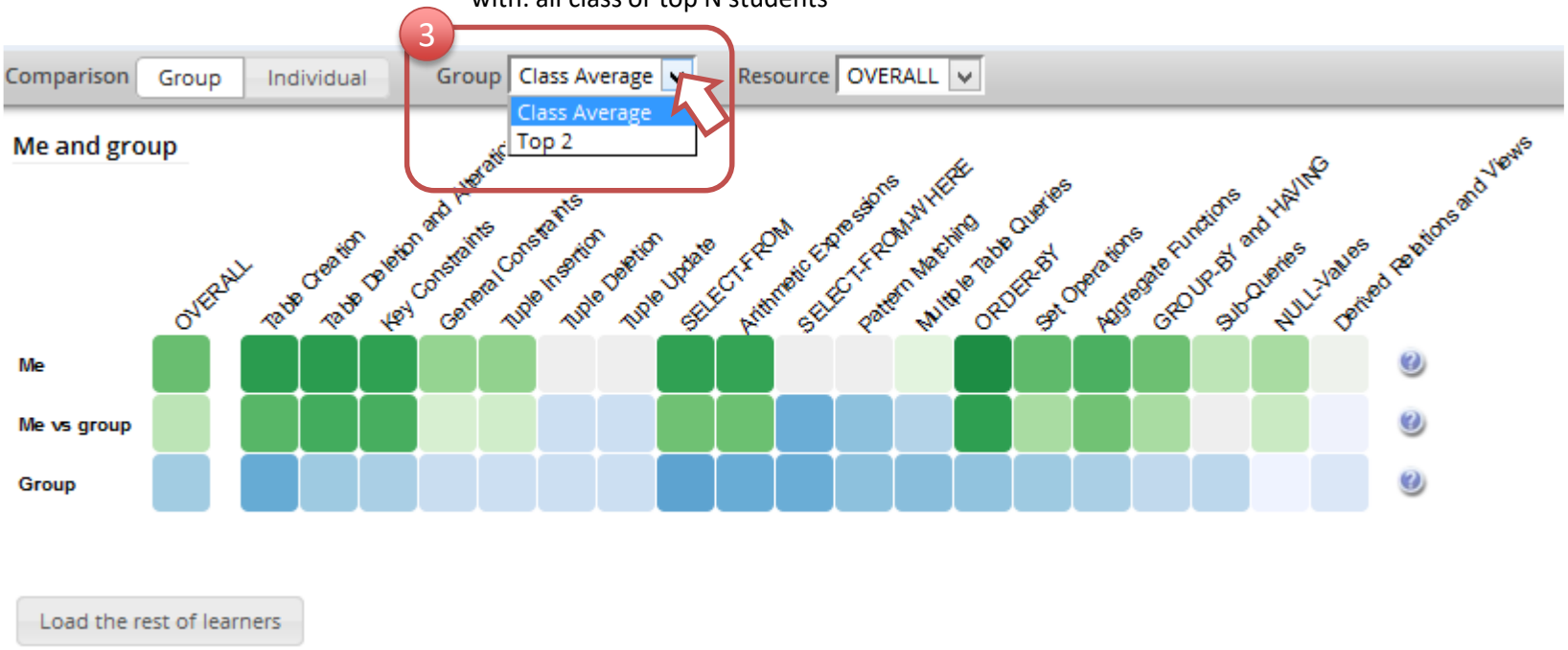
Help explains the colors (darker means more progress)

- First row (Me) shows **your progress** (Darker green means more progress on that topic)
- Third row (Group) shows the **average of your classmates progress** (Darker blue means more progress on that topic)
- Second row(Me vs group) **compares your progress with your classmates** (Darker green means you have more progress than the group; darker blue means they have more progress than you; grey means equal progress)

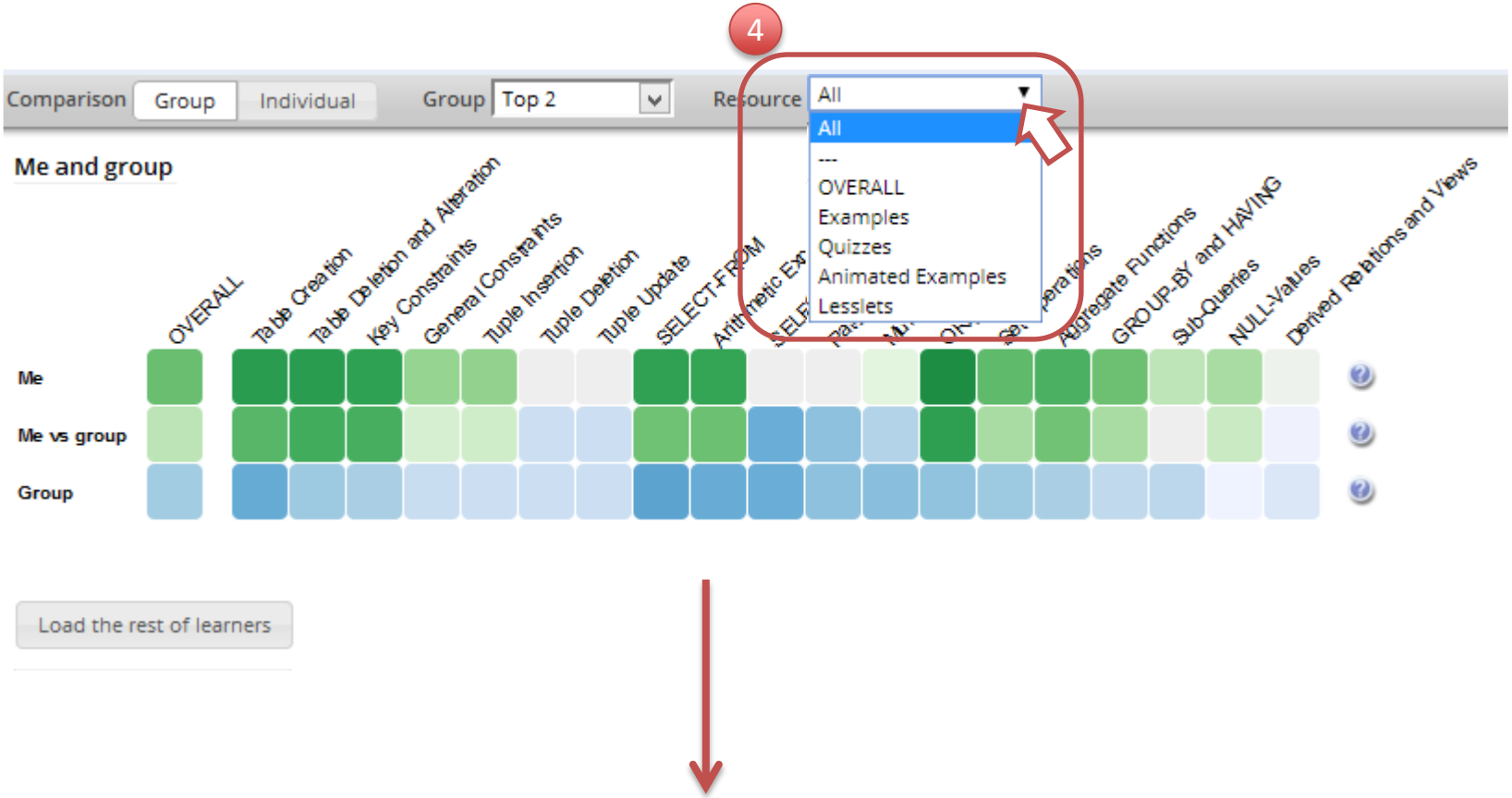
Individual button shows one row



Select the group to compare
with: all class or top N students

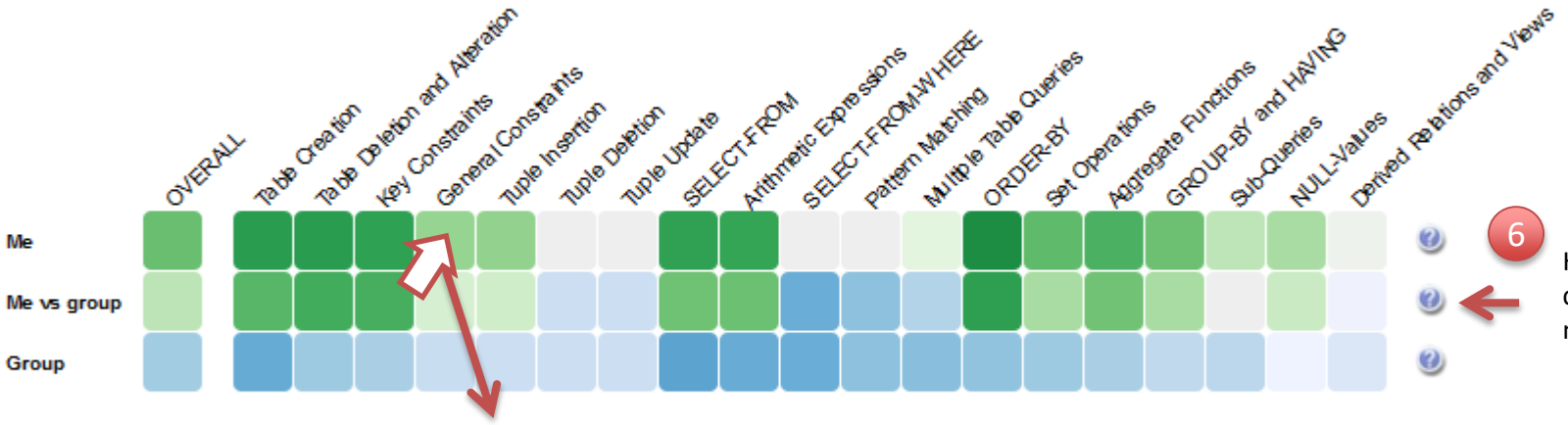


Select which type of resource progress is displayed in the grids (All, Overall, Examples, Quizzes, Animated Examples, Lesslets)



- **OVERALL** shows progress according to examples and quizzes
- **Examples** shows progress only on examples
- **Quizzes** shows progress only on quizzes (interactive questions)
- **Animated Examples** shows progress only on animated examples
- **Lesslets** shows progress only on lesslets
- **All** displays progress averaging across all content types

Me and group

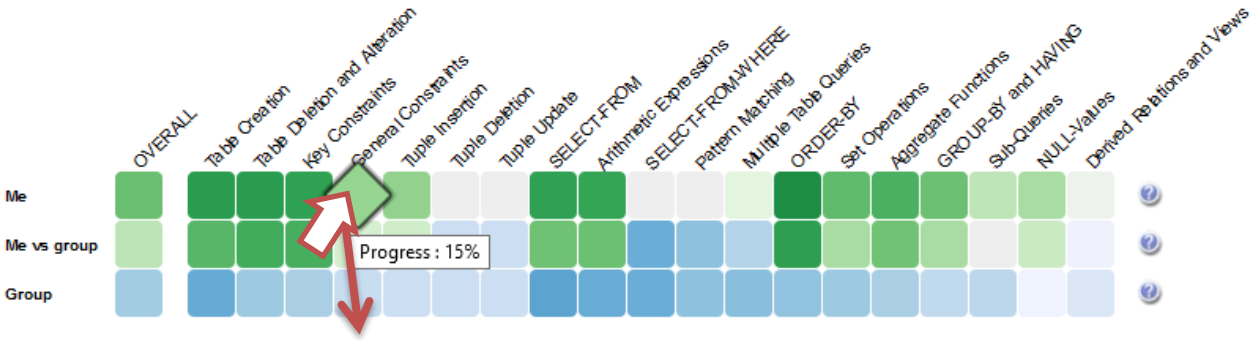


6 Help explains the colors (darker means more progress)

5 Roll the mouse cursor over the a topic cell on **Me** row

Load the rest of learners

Me and group

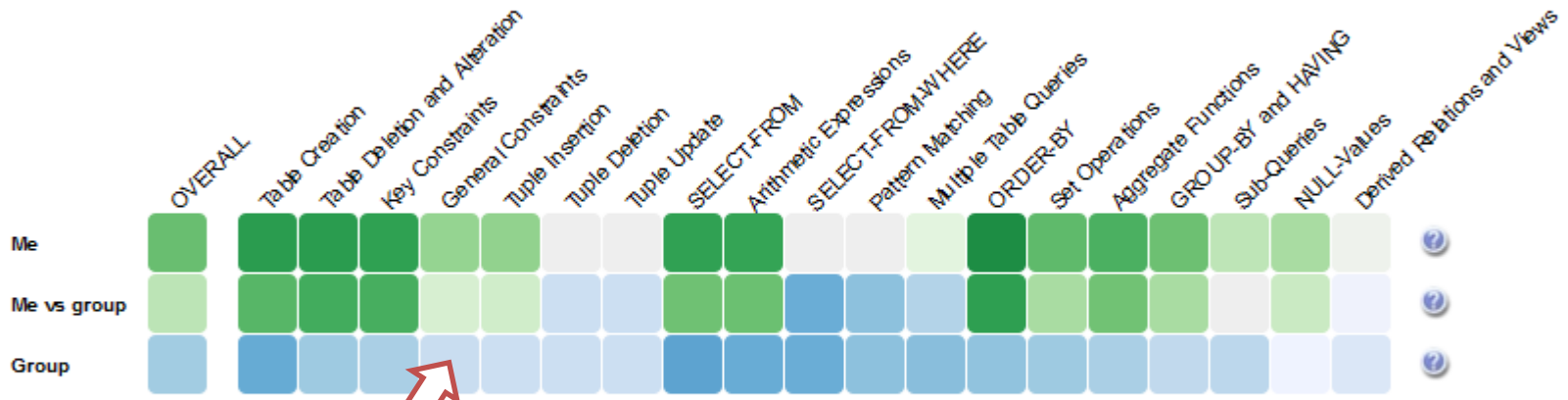


Load the rest of learners

5.1 You can see your progress percentage on the topic

5.2 You can also see your progress percentage on all topics

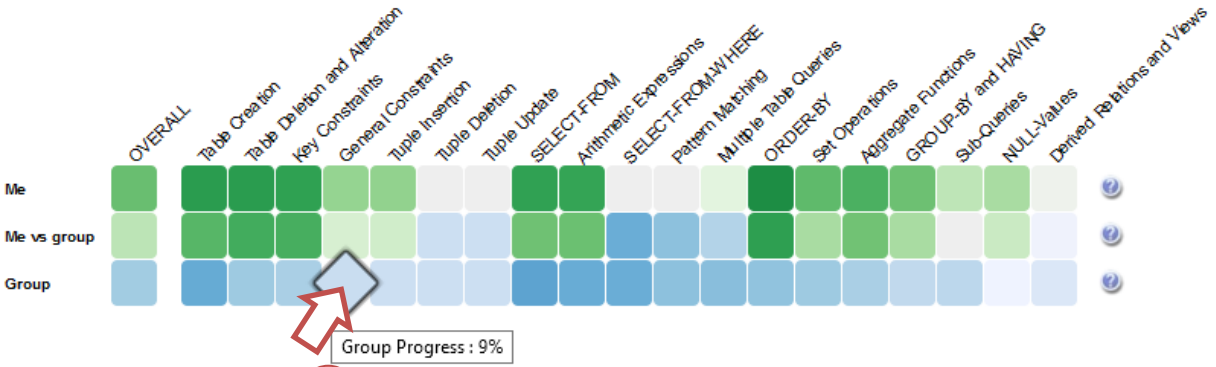
Me and group



7 Roll the mouse cursor over the a topic cell on **Group** row

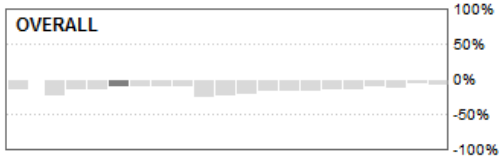
Load the rest of learners

Me and group

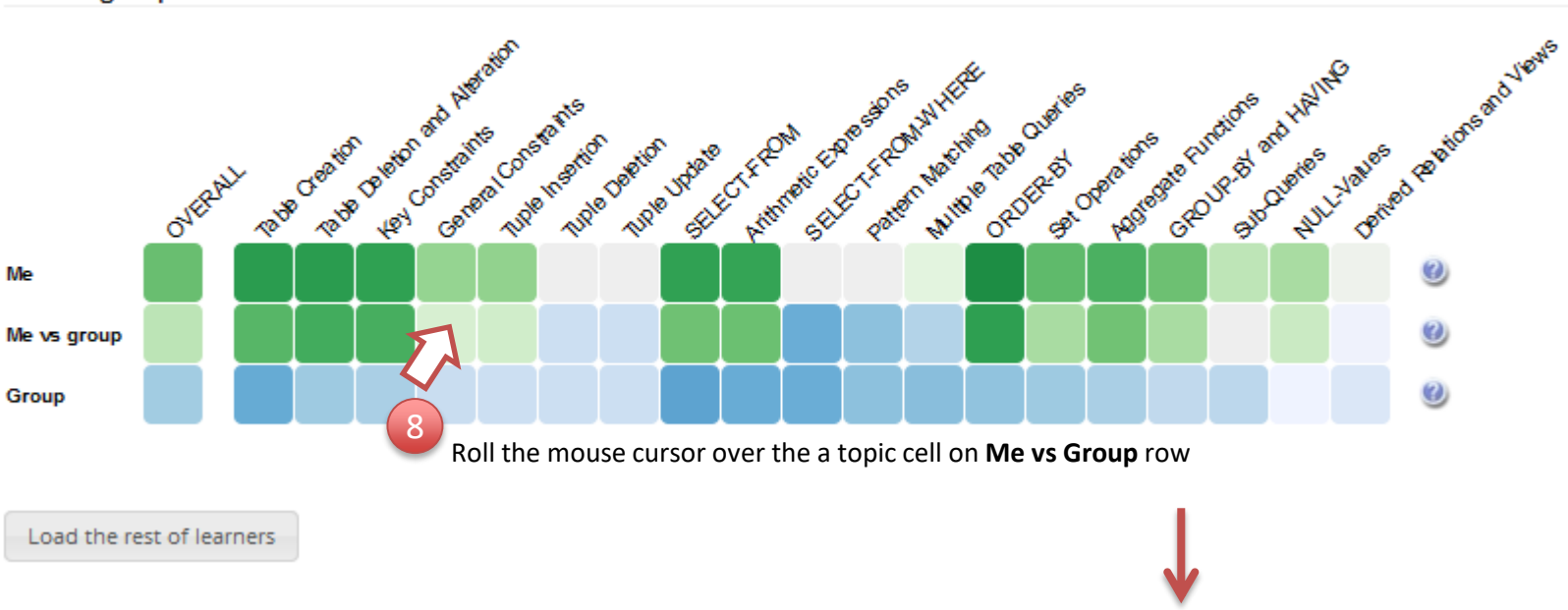


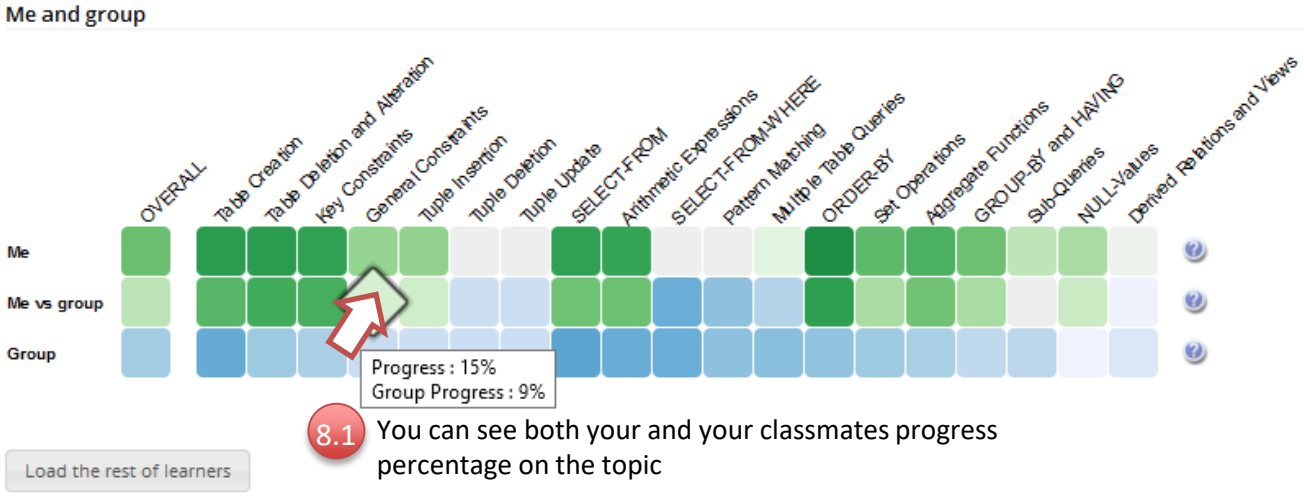
Load the rest of learners

7.1 You can see your classmates progress percentage on the topic

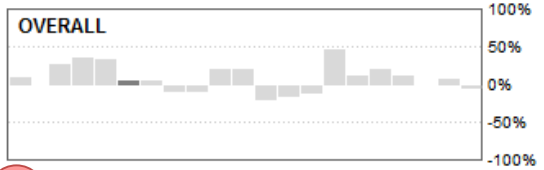


7.2 You can also see your classmates progress percentage on all topics





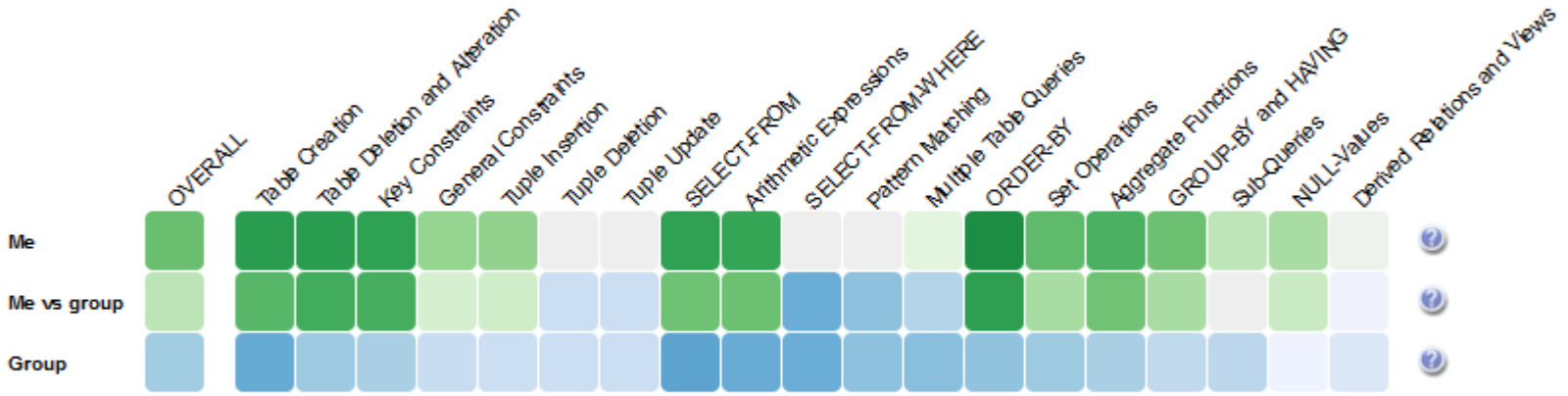
8.1 You can see both your and your classmates progress percentage on the topic



8.2 You can also see both your and your classmates progress percentage on the all topics

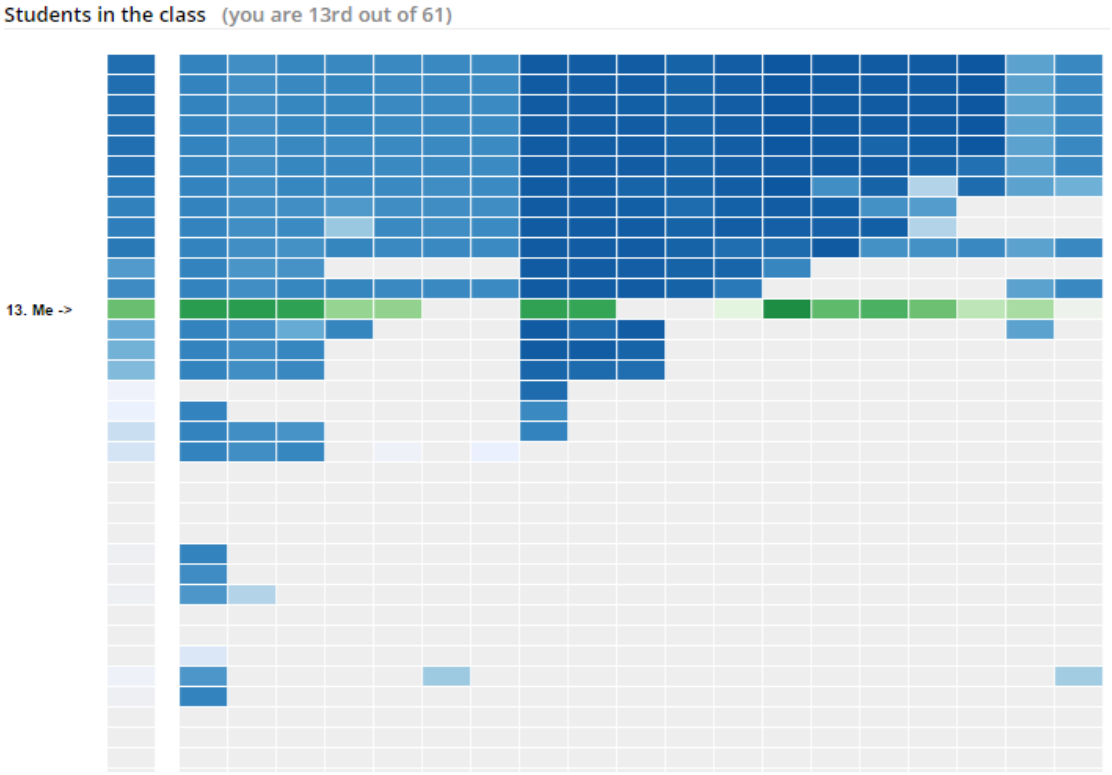
- *Positive bars show your progress*
- *Negative bars show your classmates progress*

Me and group

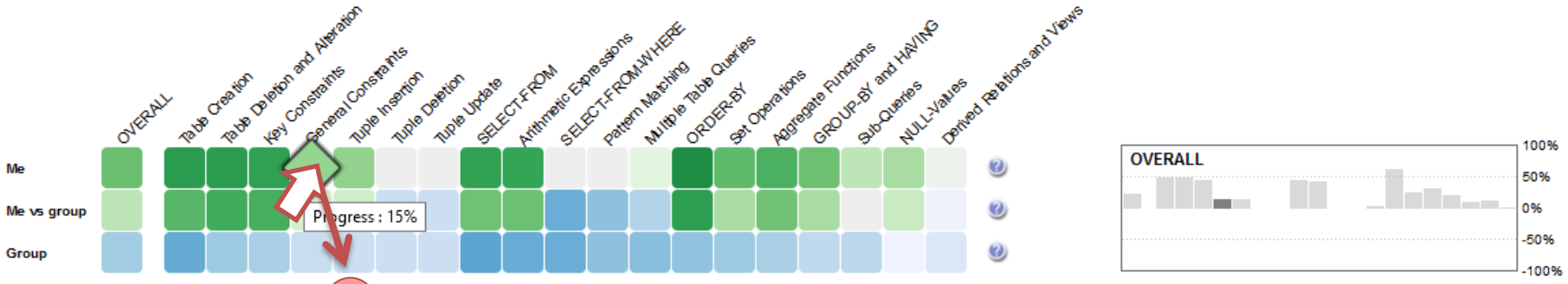


Load the rest of learners

9 Click button to load the list of other students (does not show usernames) and shows in which position you are in terms of progress

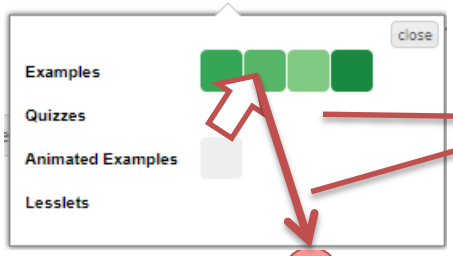


Me and group



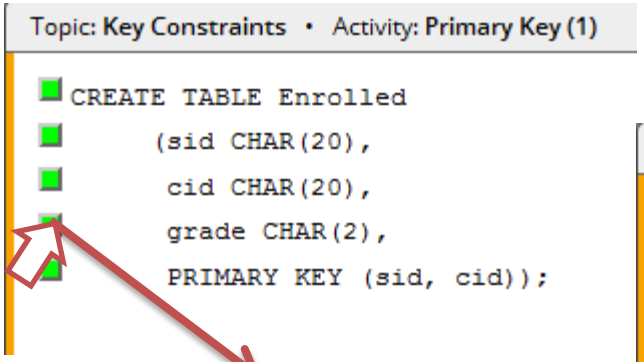
10 Click on the a topic cell to display the activities inside (Examples, Quizzes, Animated Examples, Lesslets)

Load the rest of learners

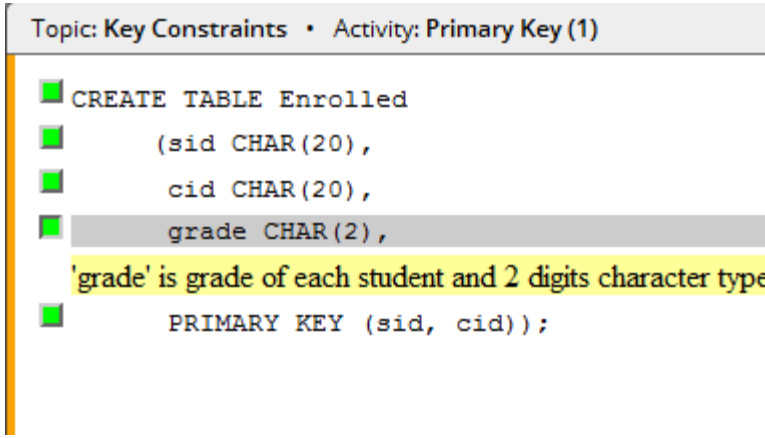


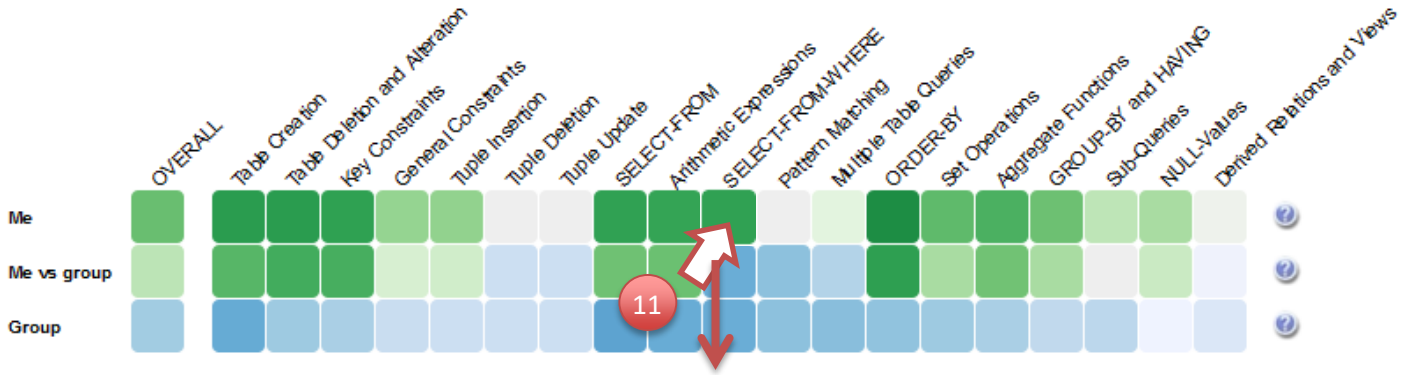
Some topics do not include any quizzes and lesslets

10.1 Click on the cells to see examples. Examples shows a piece of SQL code



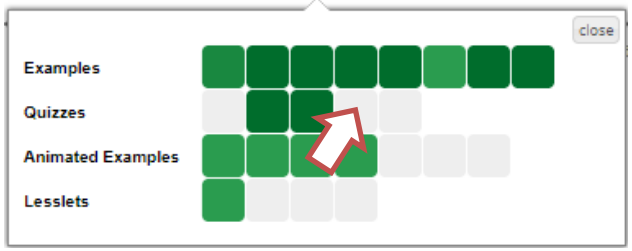
10.2 Click code rows to see explanations.





Click on the a topic cell to display the activities inside

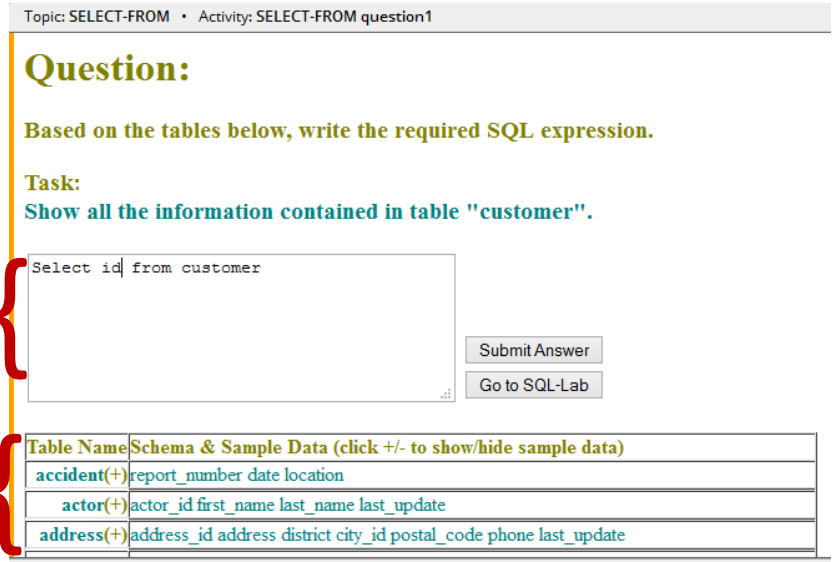
Load the rest of learners



11.1 If the topic include quizzes, click one of the cells

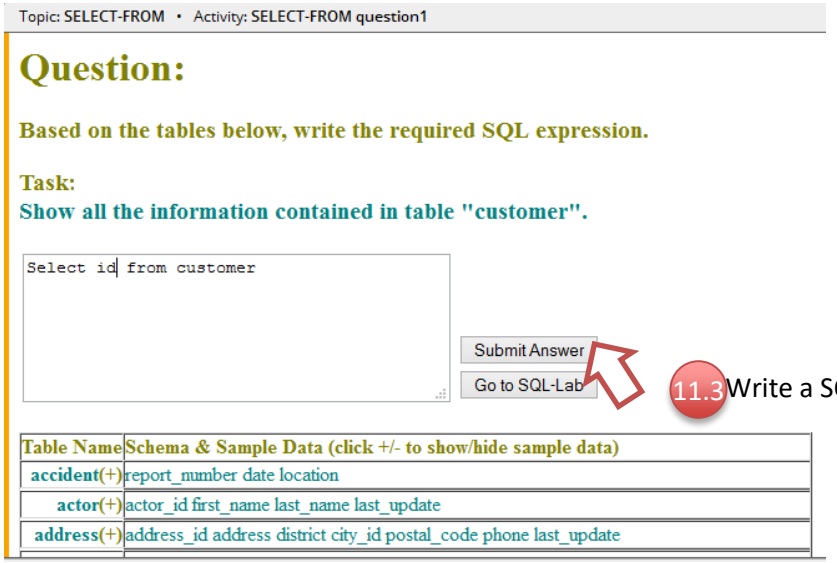
11.2

A question will be seen. This question includes a task.

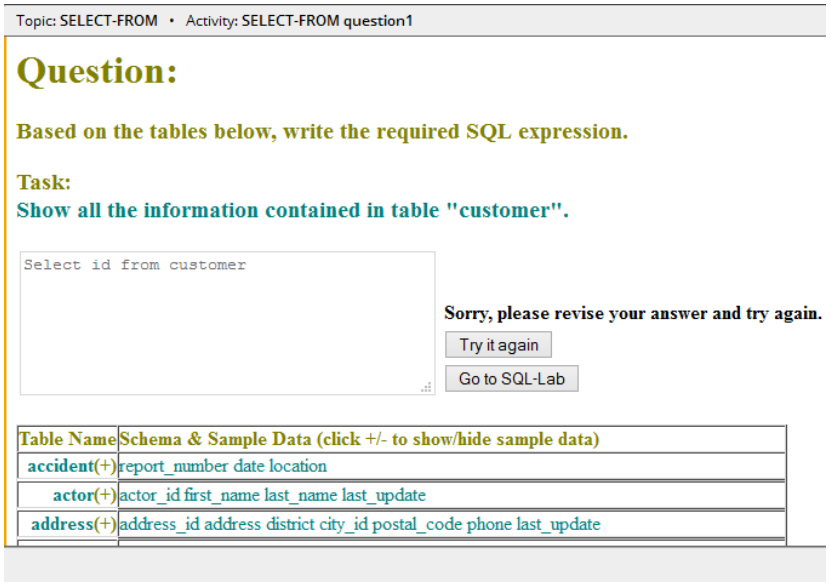


To make the task you need the write a SQL statement

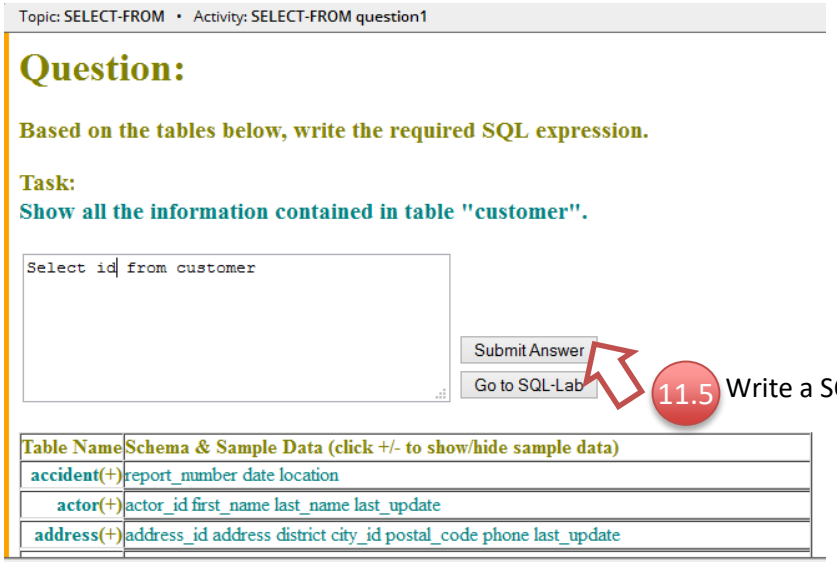
Use the data in the tables defined here to write the SQL statement for the task



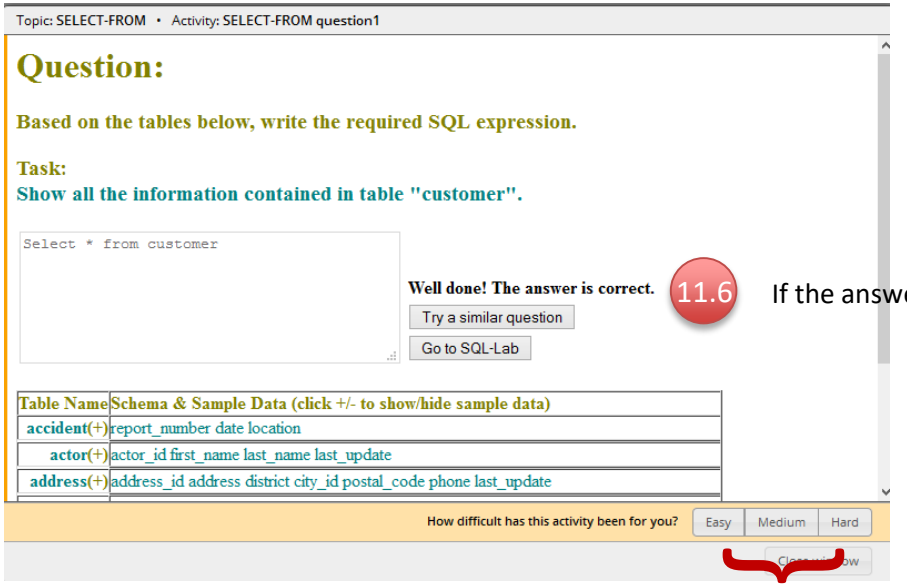
11.3 Write a SQL statement and click the "Submit Answer" button



11.4 If the answer is wrong, this feedback is shown

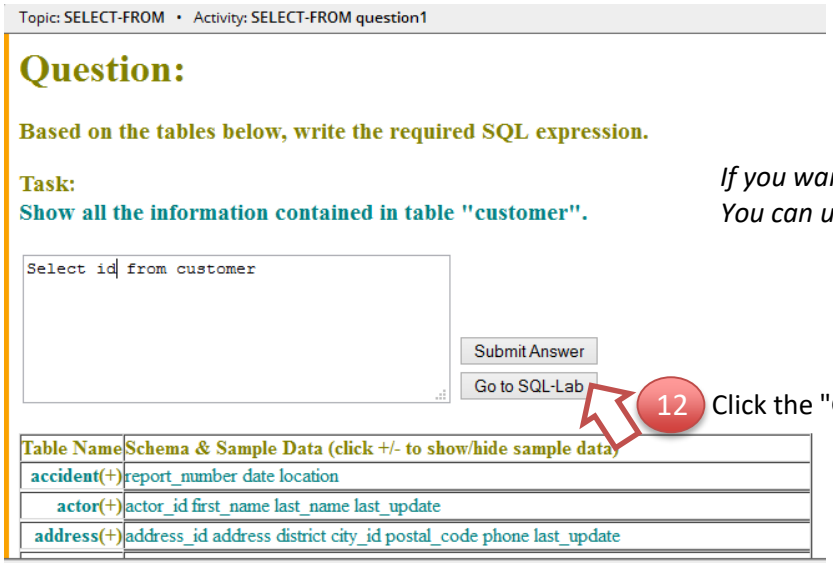


11.5 Write a SQL statement and click the "Submit Answer" button



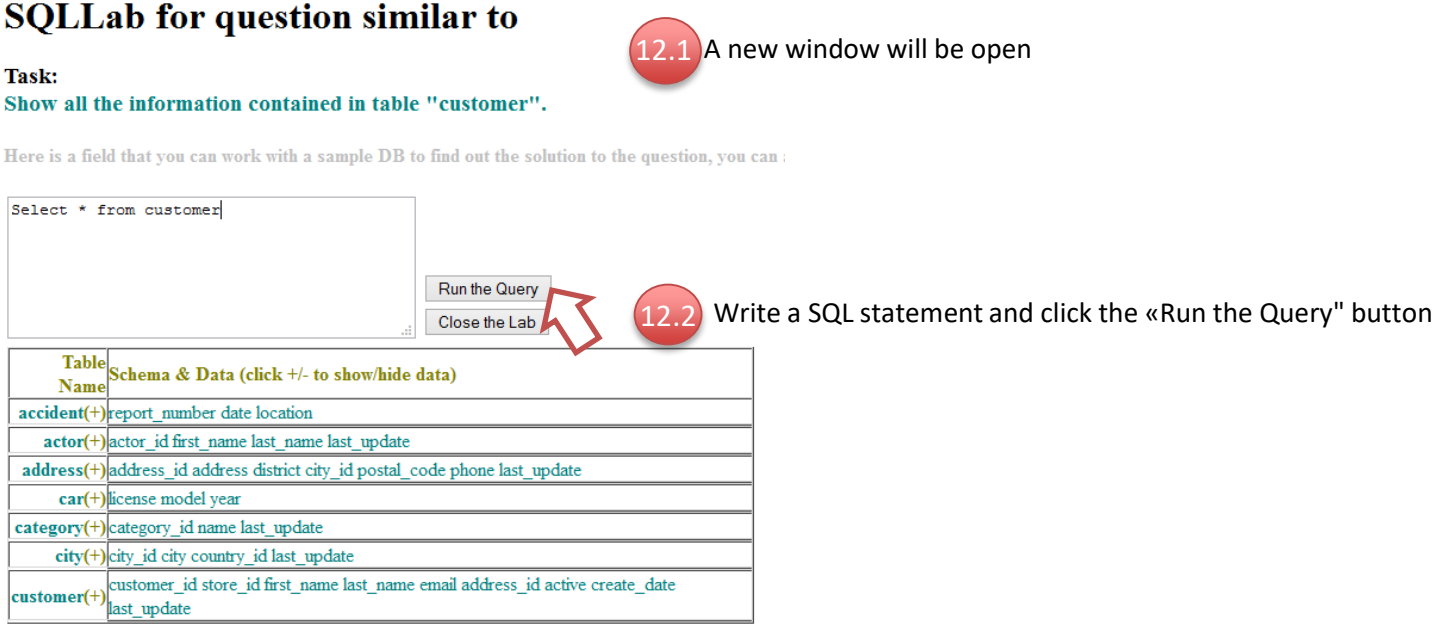
11.6 If the answer is true, this feedback is shown

11.7 Submit difficulty level for the question



If you want to try SQL statements before submit the question
You can use "Go To SQL-Lab" button

12 Click the "Go To SQL-Lab" button



12.1 A new window will be open

12.2 Write a SQL statement and click the «Run the Query" button

12.3 The Results of the SQL query is shown

The result for query: Select * from customer
is:

customer_id	store_id	first_name	last_name	email	address_id	active	create_date	last_update
1	1	MARY	SMITH	MARY.SMITH@sakilacustomer.org	5	1	2006-02-14 22:04:36.0	2006-02-15 04:57:20.0
2	1	PATRICIA	JOHNSON	PATRICIA.JOHNSON@sakilacustomer.org	6	1	2006-02-14 22:04:36.0	2006-02-15 04:57:20.0
3	1	LINDA	WILLIAMS	LINDA.WILLIAMS@sakilacustomer.org	7	1	2006-02-14 22:04:36.0	2006-02-15 04:57:20.0
4	2	BARBARA	JONES	BARBARA.JONES@sakilacustomer.org	8	1	2006-02-14 22:04:36.0	2006-02-15 04:57:20.0
5	1	ELIZABETH	BROWN	ELIZABETH.BROWN@sakilacustomer.org	9	1	2006-02-14 22:04:36.0	2006-02-15 04:57:20.0
6	2	JENNIFER	DAVIS	JENNIFER.DAVIS@sakilacustomer.org	10	1	2006-02-14 22:04:36.0	2006-02-15 04:57:20.0
7	1	MARIA	MILLER	MARIA.MILLER@sakilacustomer.org	11	1	2006-02-14 22:04:36.0	2006-02-15 04:57:20.0

SQLLab for question similar to

Task:

Show all the information contained in table "customer".

Here is a field that you can work with a sample DB to find out the solution to the question, you can :

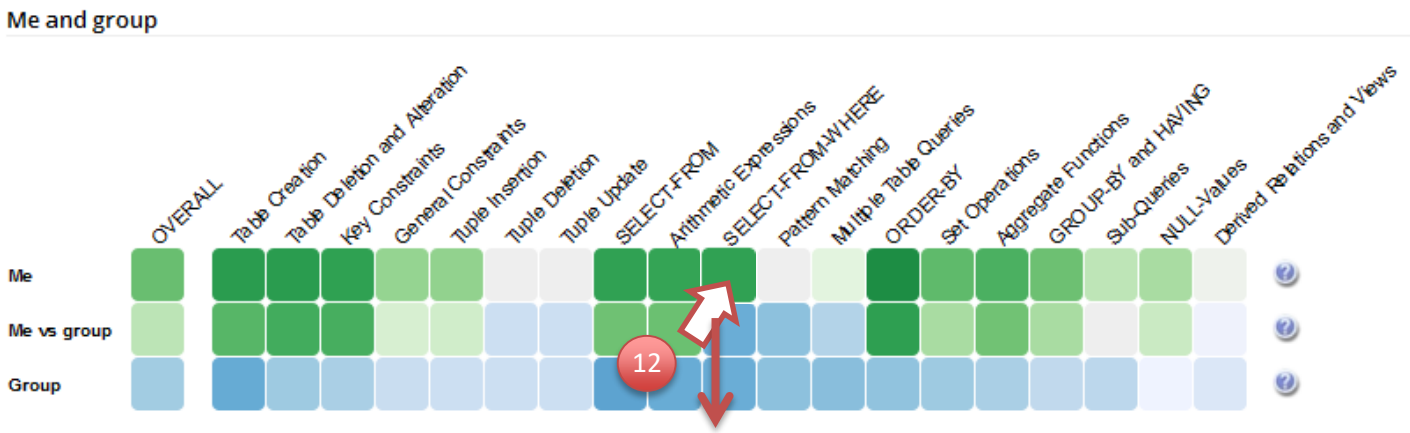
```
Select * from customer
```

Run the Query

Close the Lab

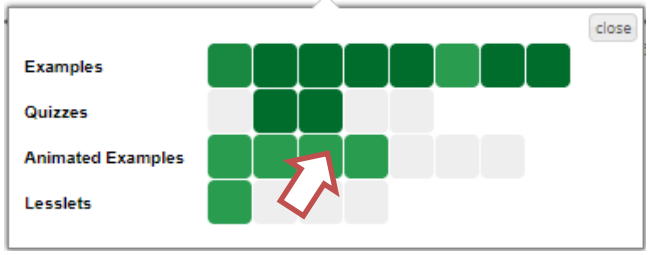
12.4 To close the screen and to retun question click the «Close the Lab" button

Table Name	Schema & Data (click +/- to show/hide data)
accident(+)	report_number date location
actor(+)	actor_id first_name last_name last_update
address(+)	address_id address district city_id postal_code phone last_update
car(+)	license model year
category(+)	category_id name last_update
city(+)	city_id city country_id last_update
customer(+)	customer_id store_id first_name last_name email address_id active create_date last_update

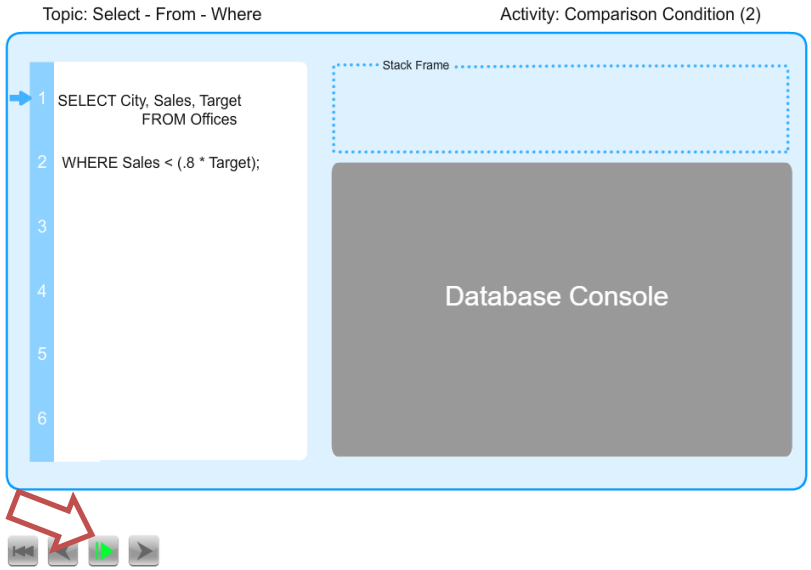


Click on the a topic cell to display the activities inside

Load the rest of learners



12.1 If the topic include animated examples, click one of the cells



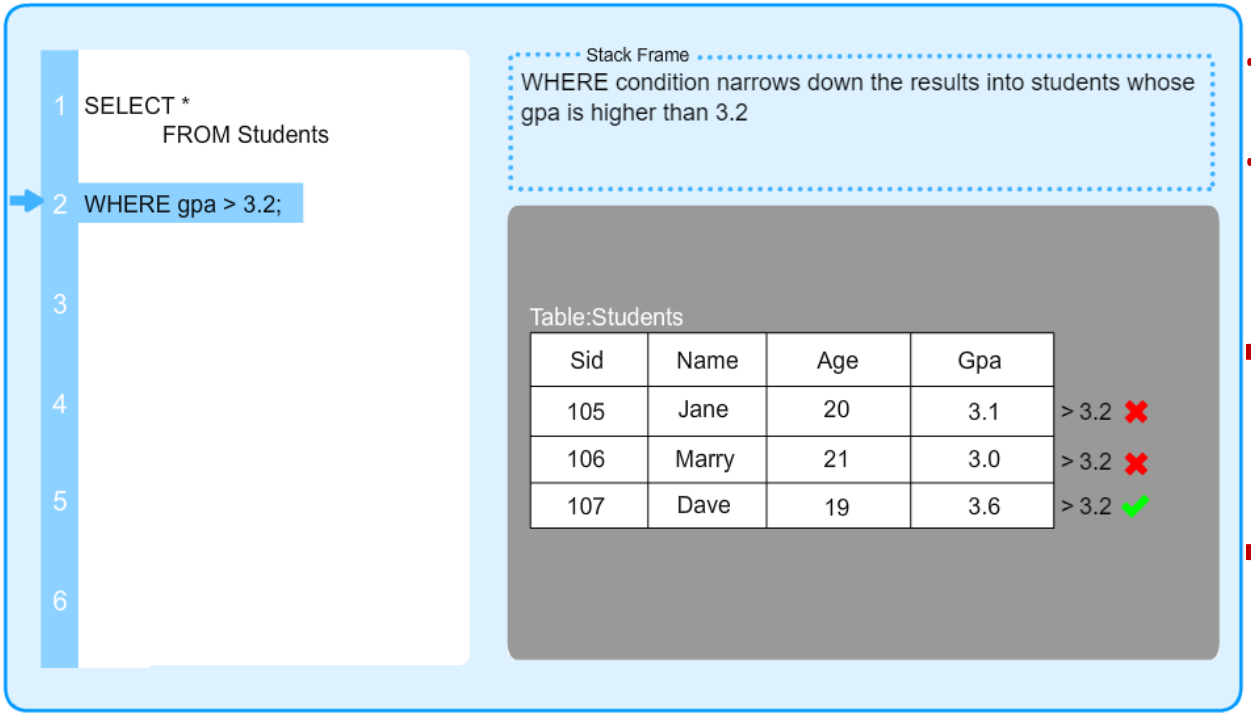
An animation activity will be seen. This animation includes an SQL statement.

12.2

Press the play button to start the animation.

Topic: Select - From - Where

Activity: Comparison Condition (1)



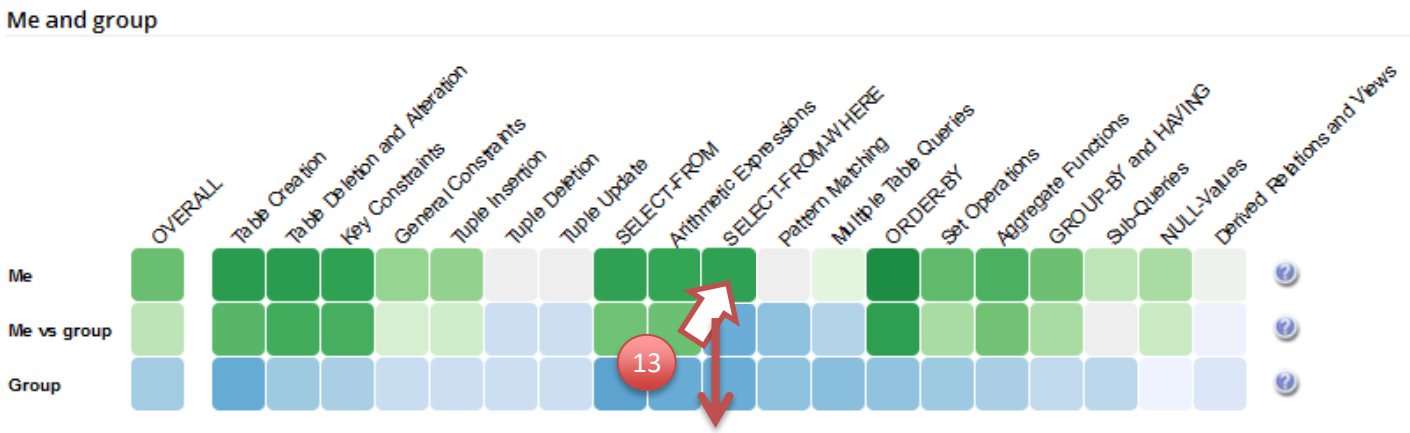
Here you can see the which part of the SQL statement is being executed by the animation. In this case, we are at 2nd step.

Here, you can see an explanation based on the animation step.

This panel shows the states of the tables based on the SQL statement steps.

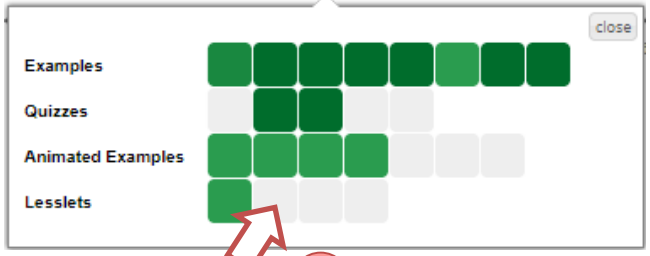
Moved one step backwards

12.3 You can press go to previous and next animation steps



Click on the a topic cell to display the activities inside

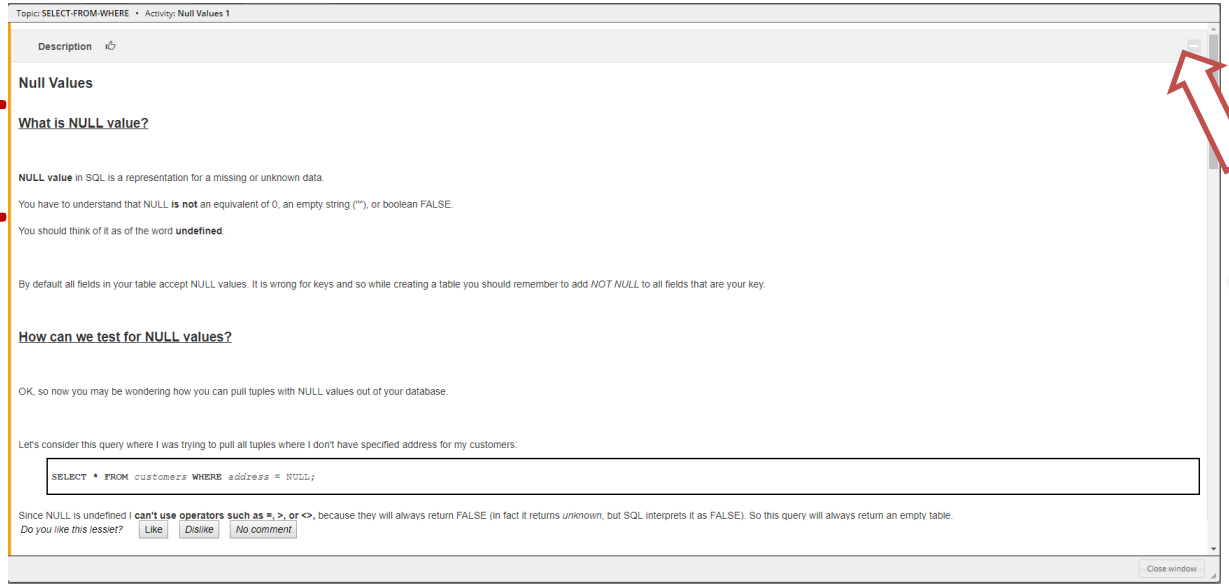
Load the rest of learners



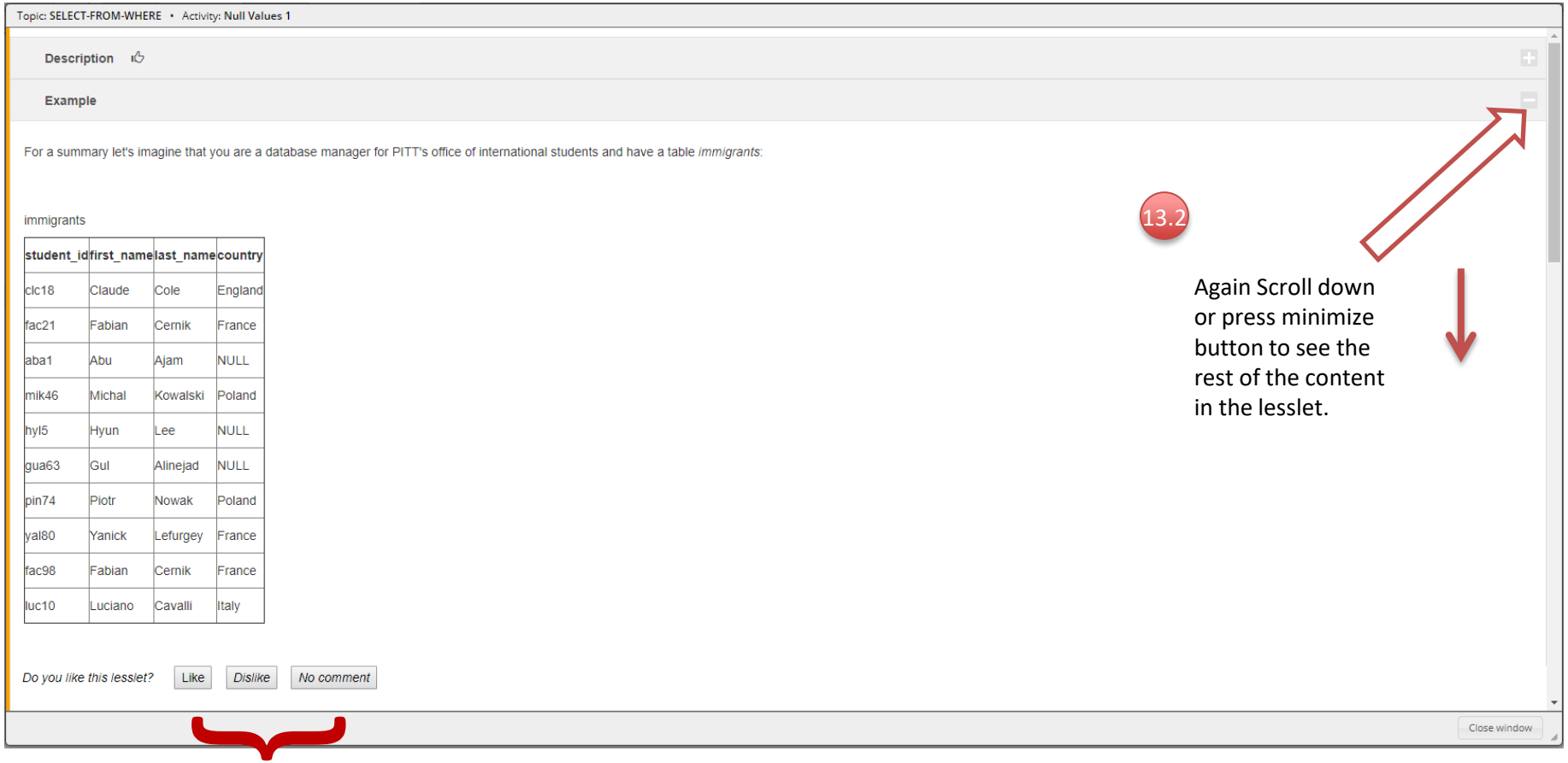
13.1 If the topic include lesslets, click one of the cells

13.2

A lesslet will be shown with a description, example and test part about an SQL topic. Here you can see the description part.



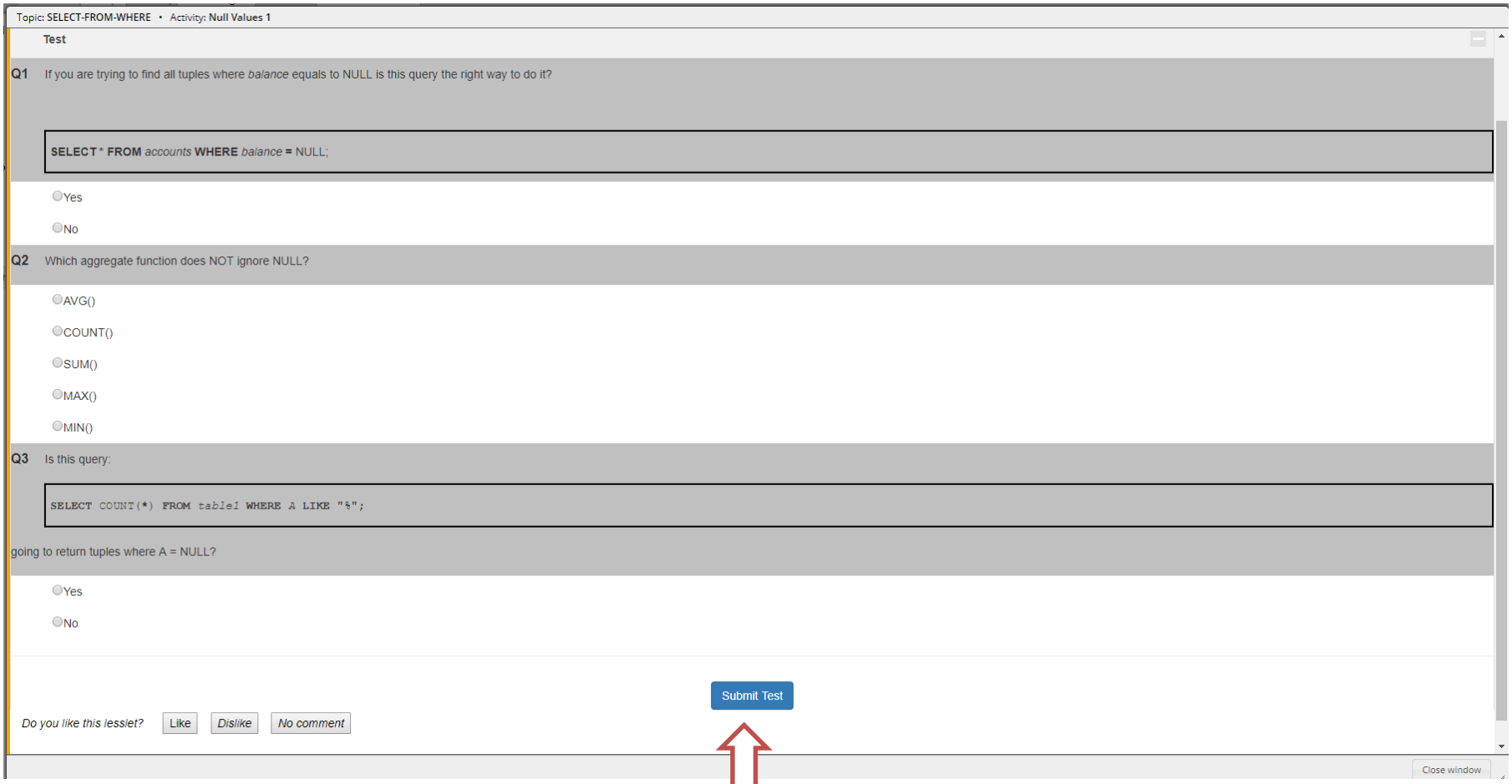
Scroll down or press minimize button to see the rest of the content in the lesslet.



13.2

Again Scroll down or press minimize button to see the rest of the content in the lesslet.

You can like or dislike the lesslet which provide feedback to the content provider about how helpful this content is.



Here, you can see the test part of the lesslet. Following the description you have read and the example you have practice, you can test your understanding in **Test** section.

13.3

Press Submit Test and submit your answers.