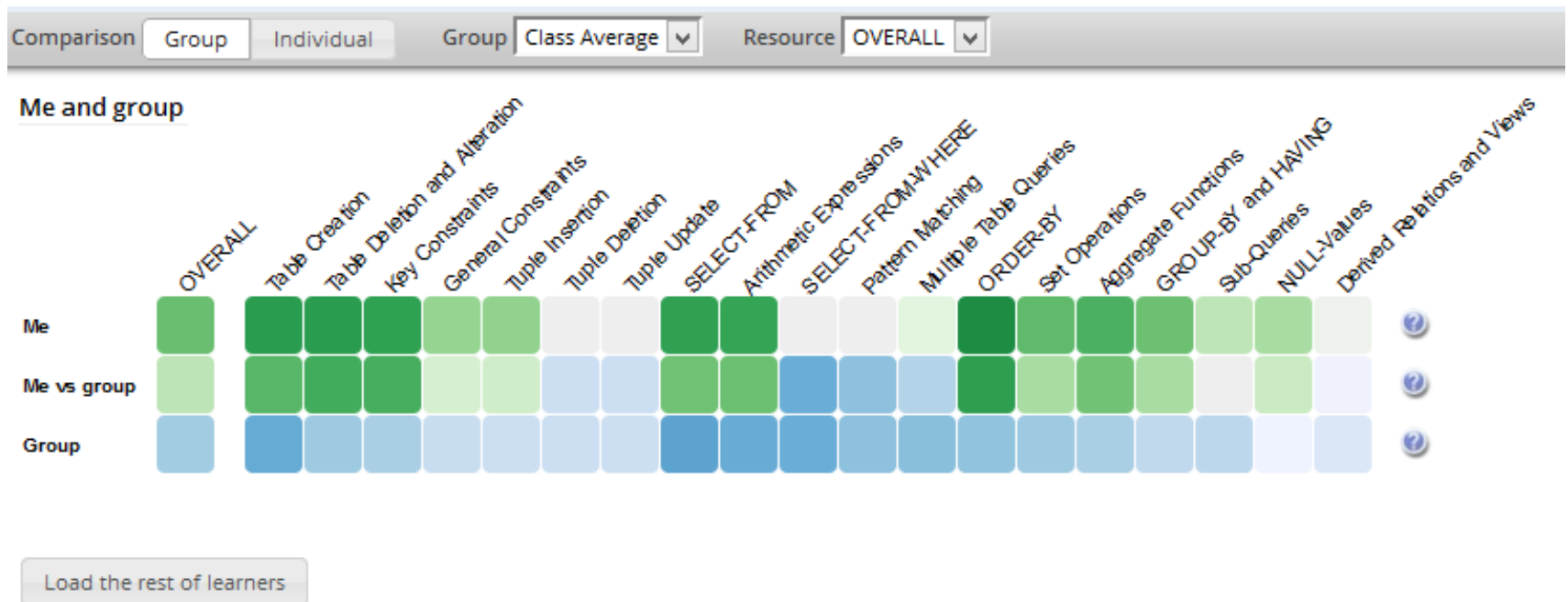


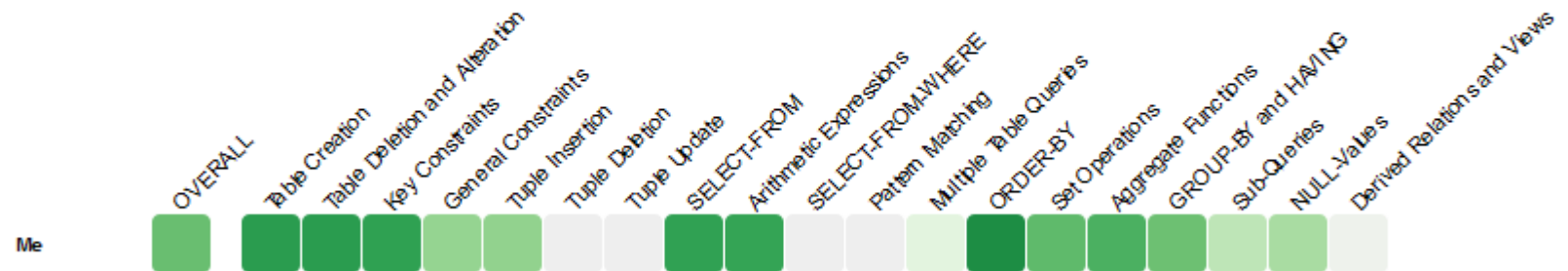
# Mastery Grids

## User Manual

PAWS Lab  
School Of Information Sciences  
University of Pittsburgh

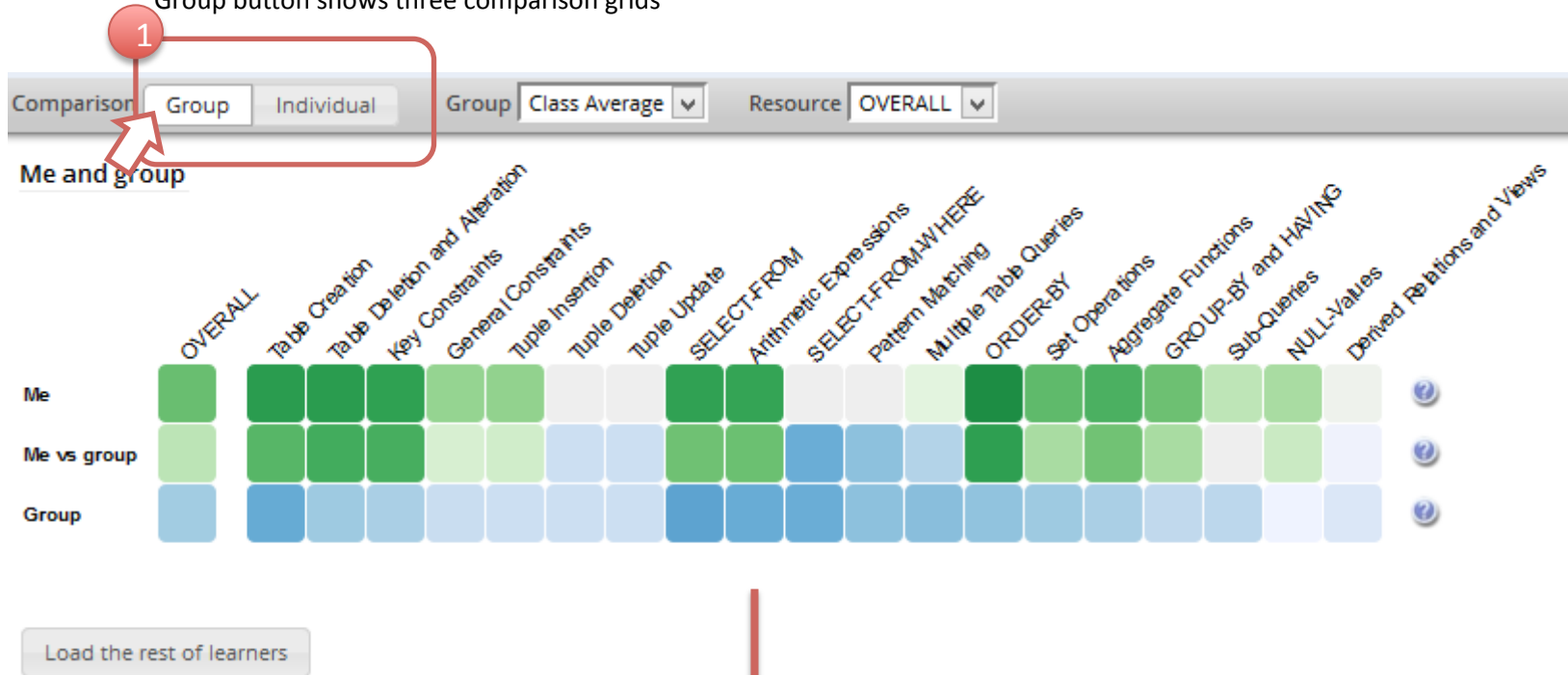


## My Progress



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

Group button shows three comparison grids



- 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

2

Comparison Group Individual Group Class Average Resource OVERALL

My Progress



Me











































































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

3

Comparison: **Group** Individual

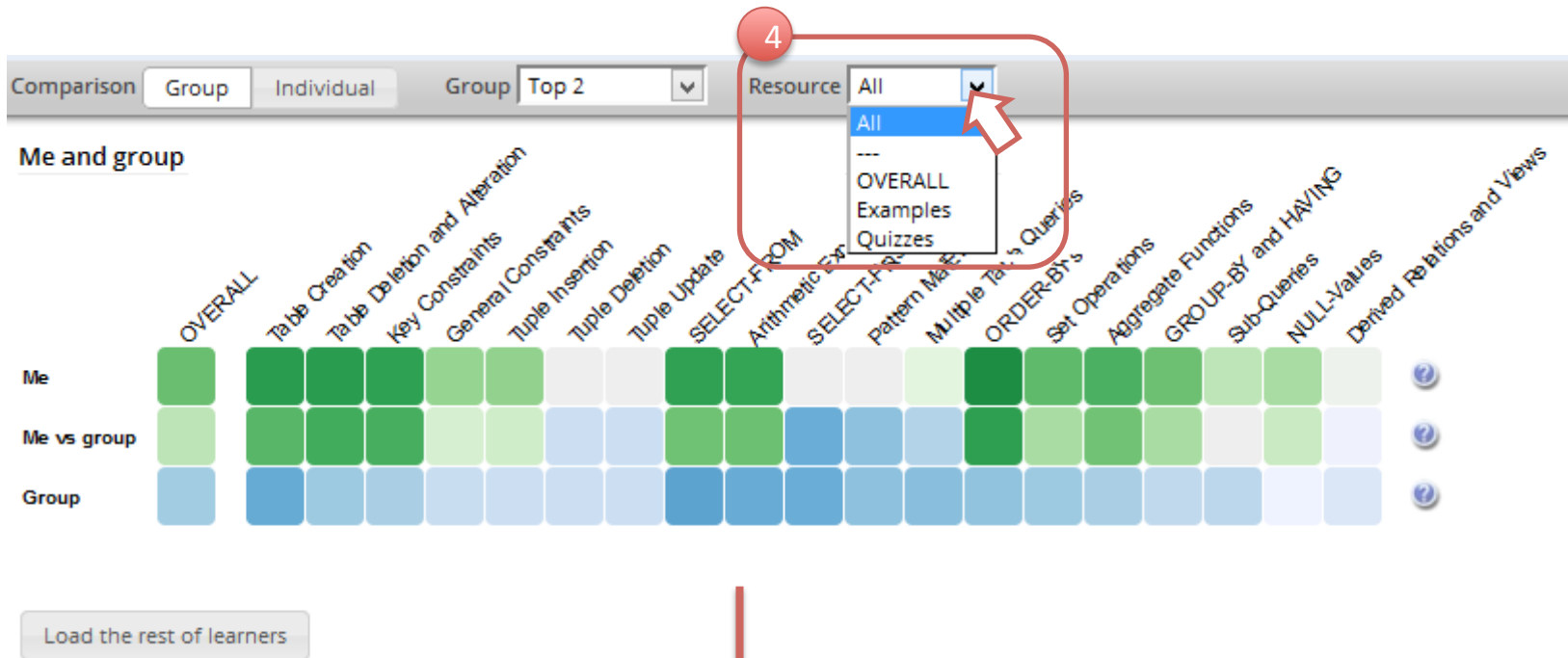
Group: **Class Average**  Resource: **OVERALL** 

**Me and group**

	OVERALL	Table Creation	Table Deletion and Alteration	Key Constraints	General Constraints	Tuple Insertion	Tuple Deletion	Tuple Update	SELECT FROM	Arithmetic Expressions	SELECT FROM WHERE	Pattern Matching	Multiple Table Queries	ORDER BY	Set Operations	Aggregate Functions	GROUP BY and HAVING	Sub-Queries	NULL-Values	Derived Relations and Views				
Me																								
Me vs group																								
Group																								

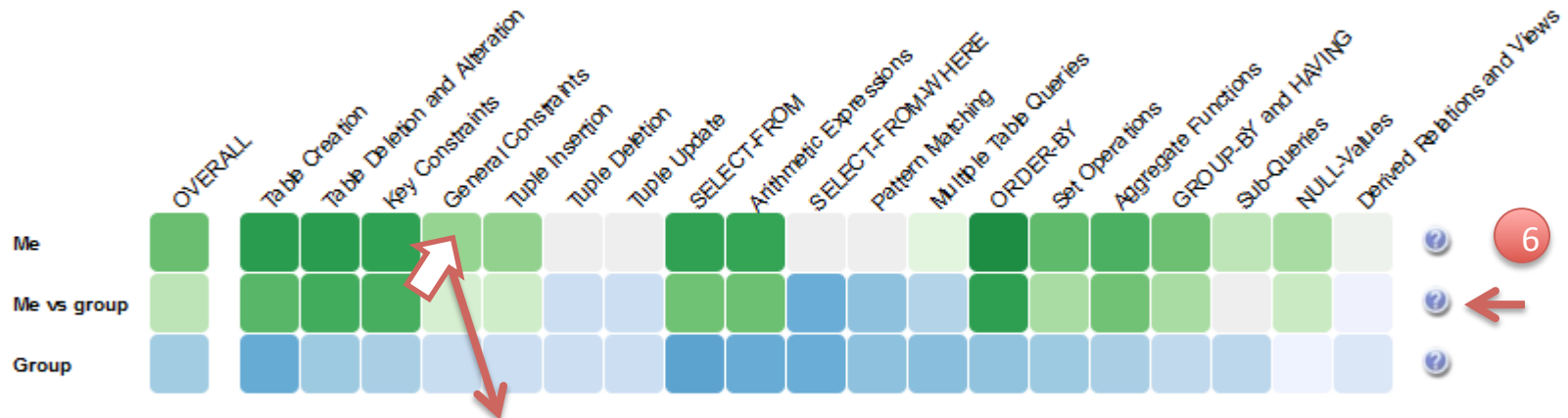
Load the rest of learners

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



- **OVERALL** shows progress according to both examples and quizzes
- **Examples** shows progress only on examples
- **Quizzes** shows progress only on quizzes (interactive questions)
- **All** displays progress averaging across examples and quizzes

## Me and group

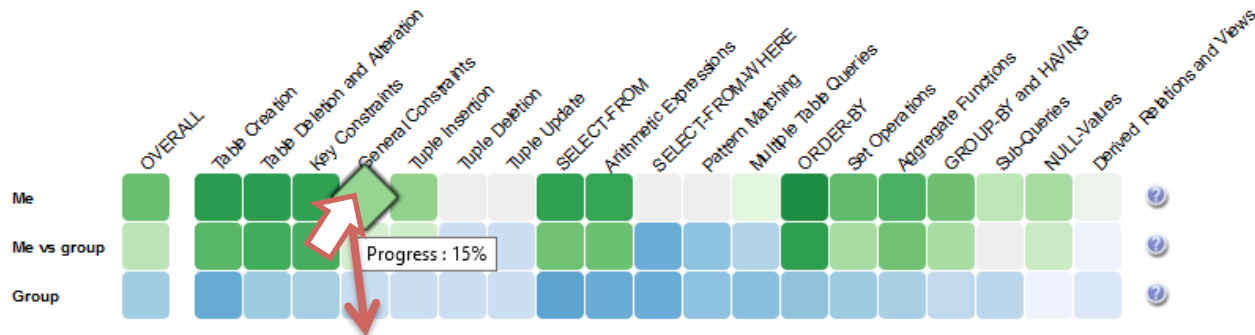


Help explains the colors (darker means more progress)

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

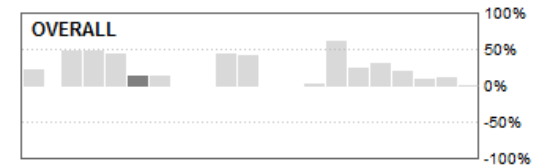
Load the rest of learners

## Me and group



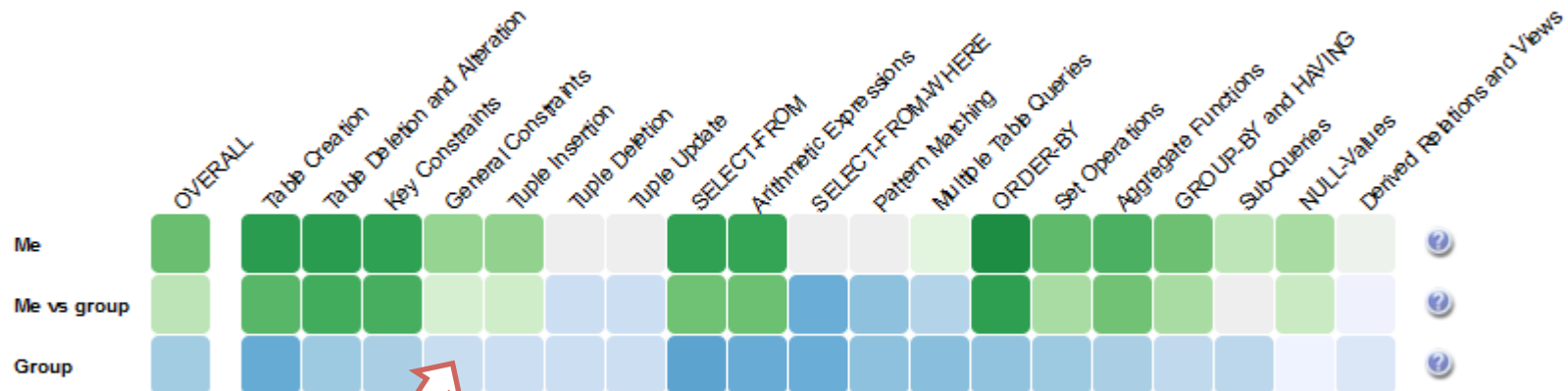
5.1 You can see your progress percentage on the topic

Load the rest of learners



5.2 You can also see your progress percentage on all topics

## Me and group

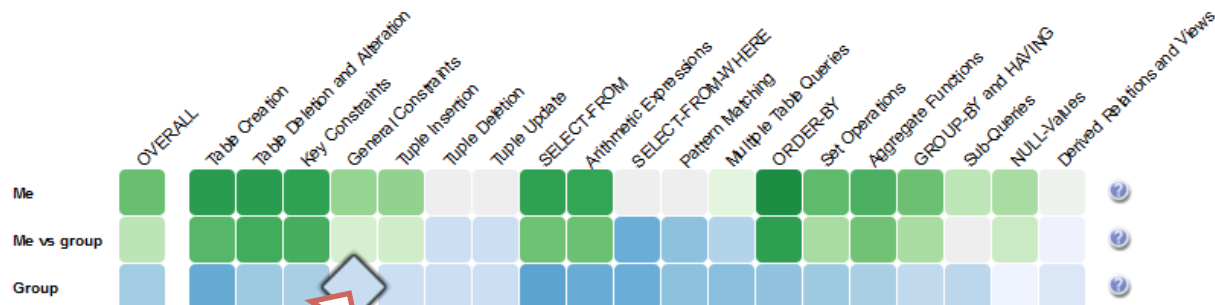


7

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

Load the rest of learners

## Me and group

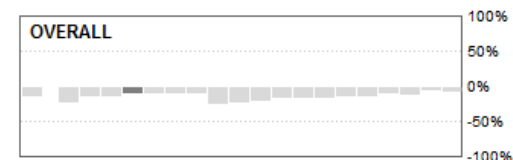


Group Progress : 9%

7.1

You can see your classmates progress percentage on the topic

Load the rest of learners

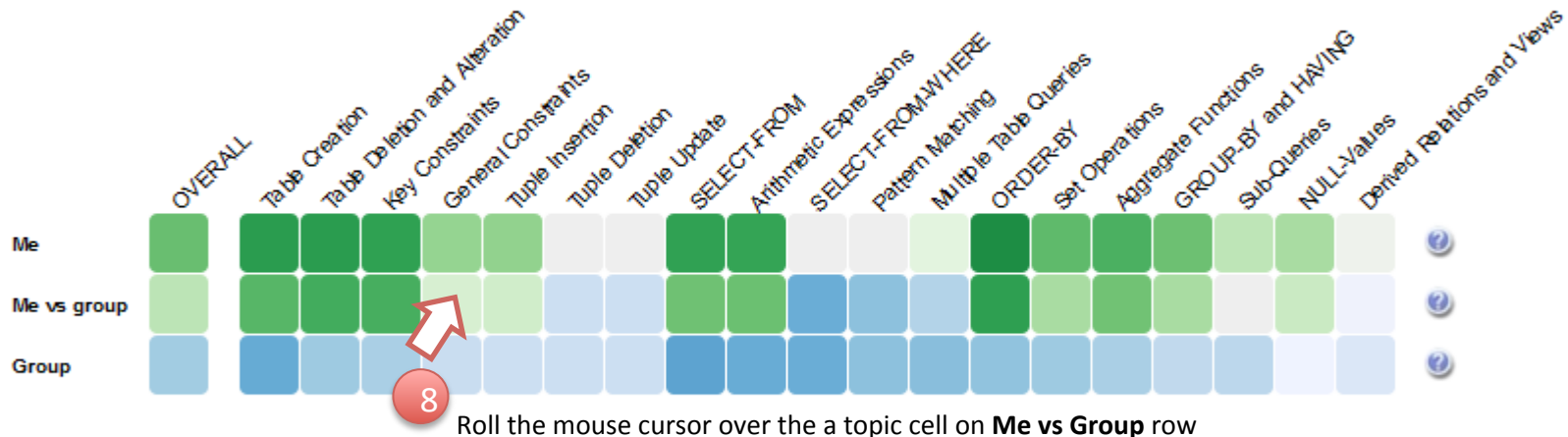


7.2

You can also see your classmates progress percentage on all topics



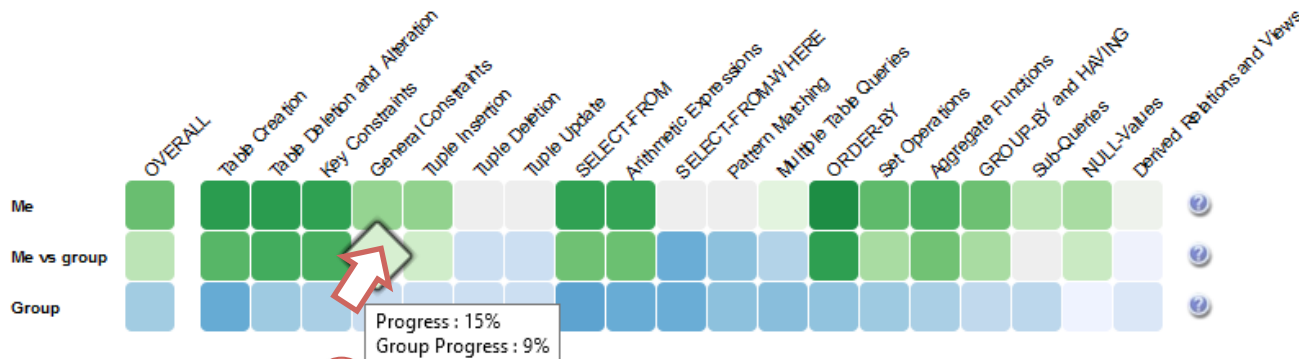
## Me and group



Load the rest of learners



## Me and group



8.1

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

Load the rest of learners

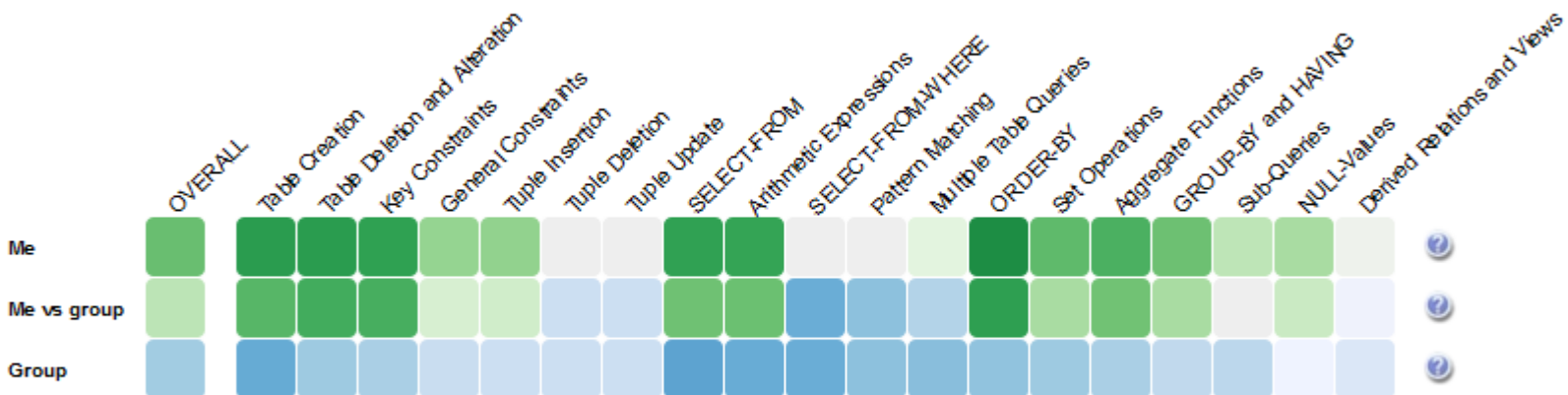


8.2

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

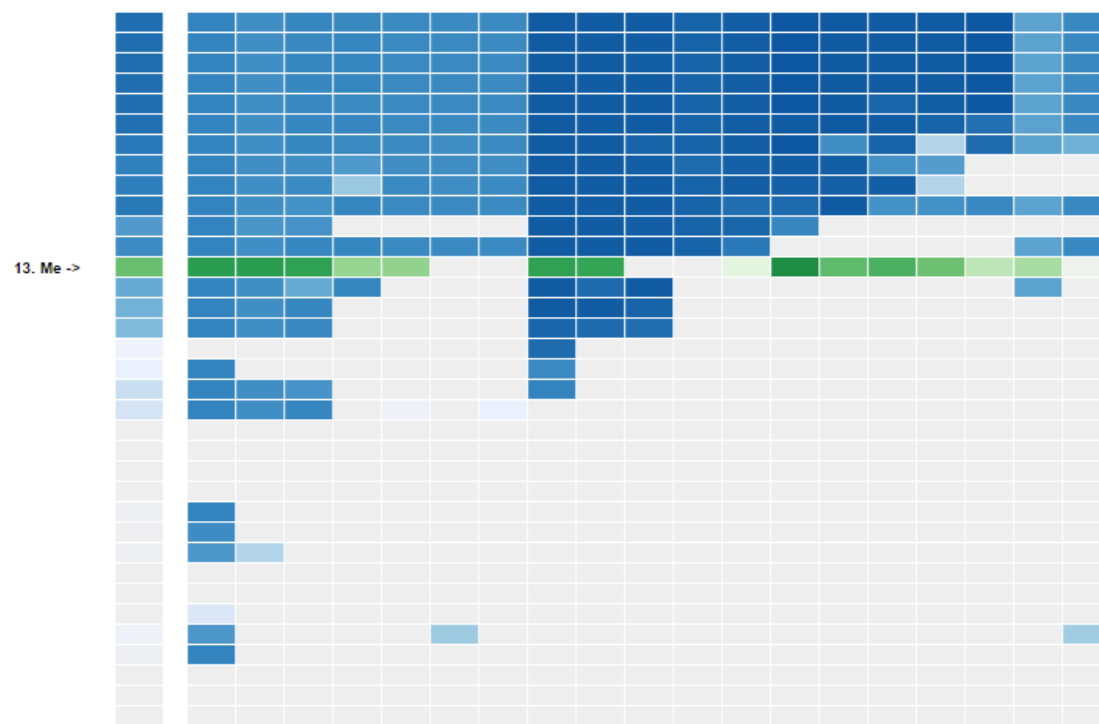


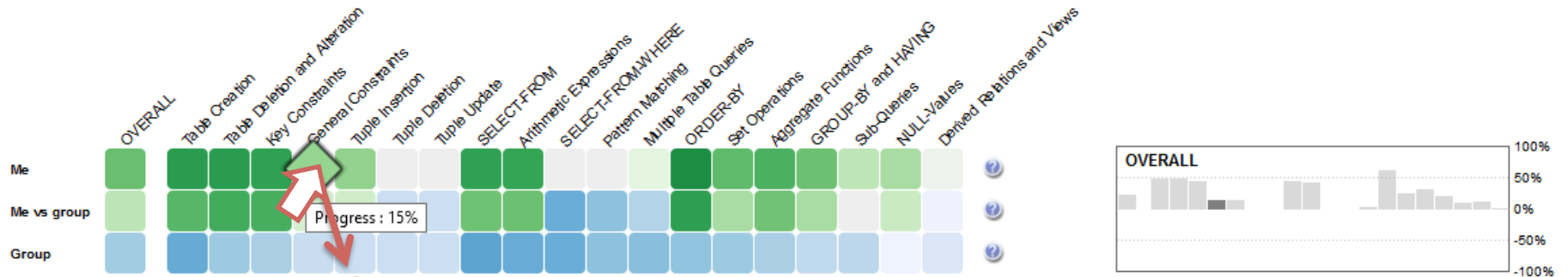
Load the rest of learners

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

Students in the class (you are 13rd out of 61)





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

Load the rest

close

Examples

Quizzes

Some topics do not include any quizzes

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

Topic: Key Constraints • Activity: Primary Key (1)

```

CREATE TABLE Enrolled
(
  sid CHAR(20),
  cid CHAR(20),
  grade CHAR(2),
  PRIMARY KEY (sid, cid));
    
```

10.2 Click code rows to see explanations.

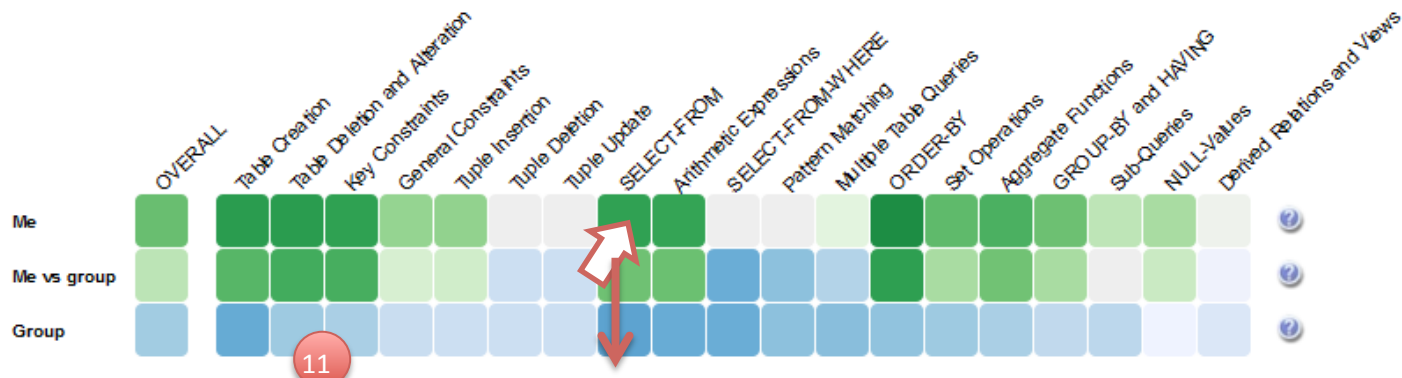
Topic: Key Constraints • Activity: Primary Key (1)

```

CREATE TABLE Enrolled
(
  sid CHAR(20),
  cid CHAR(20),
  grade CHAR(2),
  PRIMARY KEY (sid, cid));
    
```

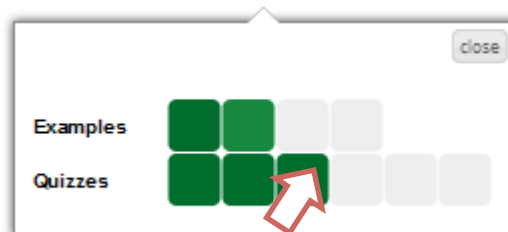
'grade' is grade of each student and 2 digits character type

## Me and group



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

Load the rest of learners



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

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

Topic: SELECT-FROM • Activity: SELECT-FROM question1

### Question:

Based on the tables below, write the required SQL expression.

#### Task:

Show all the information contained in table "customer".

Select id from customer

Submit Answer

Go to SQL-Lab

Table Name	Schema & Sample Data (click +/- to show/hide sample 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

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

## Question:

Based on the tables below, write the required SQL expression.

### Task:

Show all the information contained in table "customer".




11.3

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

Table Name	Schema & Sample Data (click +/- to show/hide sample data)
<a href="#">accident(+)</a>	report_number date location
<a href="#">actor(+)</a>	actor_id first_name last_name last_update
<a href="#">address(+)</a>	address_id address district city_id postal_code phone last_update

## Question:

Based on the tables below, write the required SQL expression.

### Task:

Show all the information contained in table "customer".

Sorry, please revise your answer and try again.



11.4

If the answer is wrong, this feedback is shown

Table Name	Schema & Sample Data (click +/- to show/hide sample data)
<a href="#">accident(+)</a>	report_number date location
<a href="#">actor(+)</a>	actor_id first_name last_name last_update
<a href="#">address(+)</a>	address_id address district city_id postal_code phone last_update

## Question:

Based on the tables below, write the required SQL expression.

### Task:

Show all the information contained in table "customer".

Select id from customer

Submit Answer

Go to SQL-Lab

11.3

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

Table Name	Schema & Sample Data (click +/- to show/hide sample data)
<a href="#">accident(+)</a>	report_number date location
<a href="#">actor(+)</a>	actor_id first_name last_name last_update
<a href="#">address(+)</a>	address_id address district city_id postal_code phone last_update

## Question:

Based on the tables below, write the required SQL expression.

### Task:

Show all the information contained in table "customer".

Select \* from customer

Well done! The answer is correct.

11.5

If the answer is true, this feedback is shown

Try a similar question

Go to SQL-Lab

Table Name	Schema & Sample Data (click +/- to show/hide sample data)
<a href="#">accident(+)</a>	report_number date location
<a href="#">actor(+)</a>	actor_id first_name last_name last_update
<a href="#">address(+)</a>	address_id address district city_id postal_code phone last_update

How difficult has this activity been for you?

Easy

Medium

Hard

11.6

Submit difficulty level for the question

## Question:

Based on the tables below, write the required SQL expression.

**Task:**

Show all the information contained in table "customer".

*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

Table Name	Schema & Sample Data (click +/- to show/hide sample data)
<a href="#">accident(+)</a>	report_number date location
<a href="#">actor(+)</a>	actor_id first_name last_name last_update
<a href="#">address(+)</a>	address_id address district city_id postal_code phone last_update

## SQLLab for question similar to

**Task:**

Show all the information contained in table "customer".

12.1

A new window will be open

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




12.2

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

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

## 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



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