**SQL\_Views Assignment**

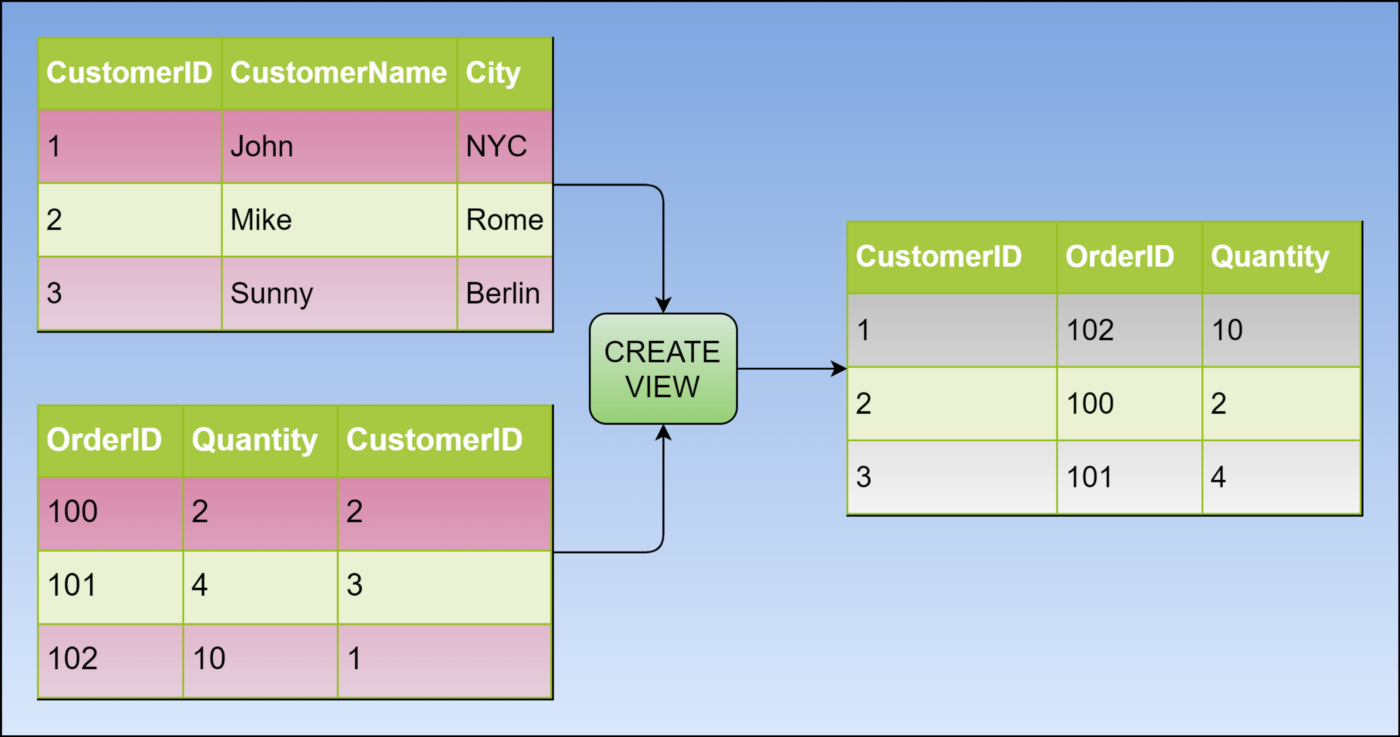
***Note*:** This assignment has to be completely performed in MYSQL Workbench. Select your OS type and download workbench from the given link. <https://dev.mysql.com/downloads/workbench/>

The version of MYSQL Workbench used for this assignment is 8.0.27

You can use any other stable version.

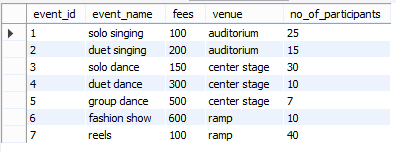
Follow:<https://youtu.be/YSOY_NyOg40>

* Views in SQL are kind of virtual tables. A View can either have all the rows of a table or specific rows based on certain condition.



**SCHEMA**

**EVENTS TABLE PARTICIPANT TABLE**



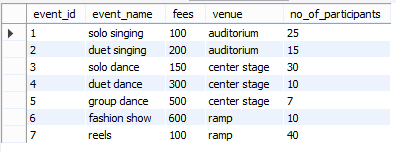
**Before beginning, lets first create a table and insert data.**

Create table ‘events’ having columns event\_id,event\_name,fees,venue,no\_of\_participants

This is how our events table should look like

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**EVENTS TABLE**



**CREATING VIEWS**

We can create View using **CREATE VIEW** statement. A View can be created from a single table or multiple tables.

**Syntax**:

CREATE VIEW view\_name AS

SELECT column1, column2.....

FROM table\_name

WHERE condition;

**view\_name**: Name for the View

**table\_name**: Name of the table

**condition**: Condition to select rows

**Creating View from a single table:**

CREATE VIEW DetailsView AS

SELECT NAME, ADDRESS

FROM StudentDetails

WHERE S\_ID < 5;

**Q1. Create a view having event name and venue for events having more than 10 participants and venue as center stage.**

**YOUR QUERY HERE:**

create view view1 as

select event\_name,venue from events

where no\_of\_participants > 10 and venue = 'center stage';

**Output:**

****

**Q2. Create a view having event name and venue for events having venue as auditorium.**

**YOUR QUERY HERE:**

create view view2 as

select event\_name,venue from events

where venue = 'auditorium';

**Output:**

****

**Creating View from multiple tables**:

CREATE VIEW MarksView AS

SELECT StudentDetails.NAME, StudentDetails.ADDRESS, StudentMarks.MARKS

FROM StudentDetails, StudentMarks

WHERE StudentDetails.NAME = StudentMarks.NAME;

**For creating views from multiple tables, lets create a second table and insert data.**

Create table ‘participant’ having columns, participant\_name,event\_name, ,fees\_paid\_or\_not

This is how our schema should look like.

**PARTICIPANT TABLE**



**Q3. Create a view from events and participant tables having matching event names.**

**YOUR QUERY HERE:**

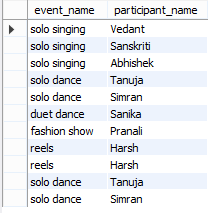
create view view3 as

select e.event\_name, p.participant\_name

from events as e, participant as p

where e.event\_name = p.event\_name;

**Output:**

****

**Q4. Create a view of event name and participant name participating in solo singing event.**

**YOUR QUERY HERE:**

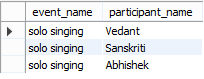
create view view4 as

select e.event\_name, p.participant\_name

from events as e, participant as p

where e.event\_name = p.event\_name and e.event\_name = 'solo singing';

**Output:**

****

**DELETING VIEWS**

**Syntax**:

DROP VIEW view\_name;

**Q5. Delete the view3.**

**YOUR QUERY HERE:**

drop view view3;

**Output:**



**UPDATING VIEWS**

1. The SELECT statement which is used to create the view should not include GROUP BY clause or ORDER BY clause.
2. The SELECT statement should not have the DISTINCT keyword.
3. The View should have all NOT NULL values.
4. The view should not be created using nested queries.
5. The view should be created from a single table.

We can use the **CREATE OR REPLACE VIEW** statement to add or remove fields from a view.

**Syntax**:

CREATE OR REPLACE VIEW view\_name AS

SELECT column1,coulmn2,..

FROM table\_name

WHERE condition;

**Q6. Replace the view2 with participant names who have not paid the fees.**

**YOUR QUERY HERE:**

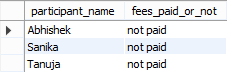
create or replace view view2 as

select participant\_name, fees\_paid\_or\_not

from participant

where fees\_paid\_or\_not = 'not paid';

**Output:**



**Inserting a row in a view**:

**Syntax**:

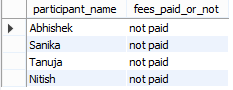
INSERT INTO view\_name(column1, column2 , column3,..) VALUES(value1, value2, value3..);

**Q7. Insert a row of values in the view2.**

**YOUR QUERY HERE:**

insert into view2(participant\_name, fees\_paid\_or\_not) values("Nitish","not paid");

**Output:**

****

***Congratulations, you have just completed an assignment!!***

