

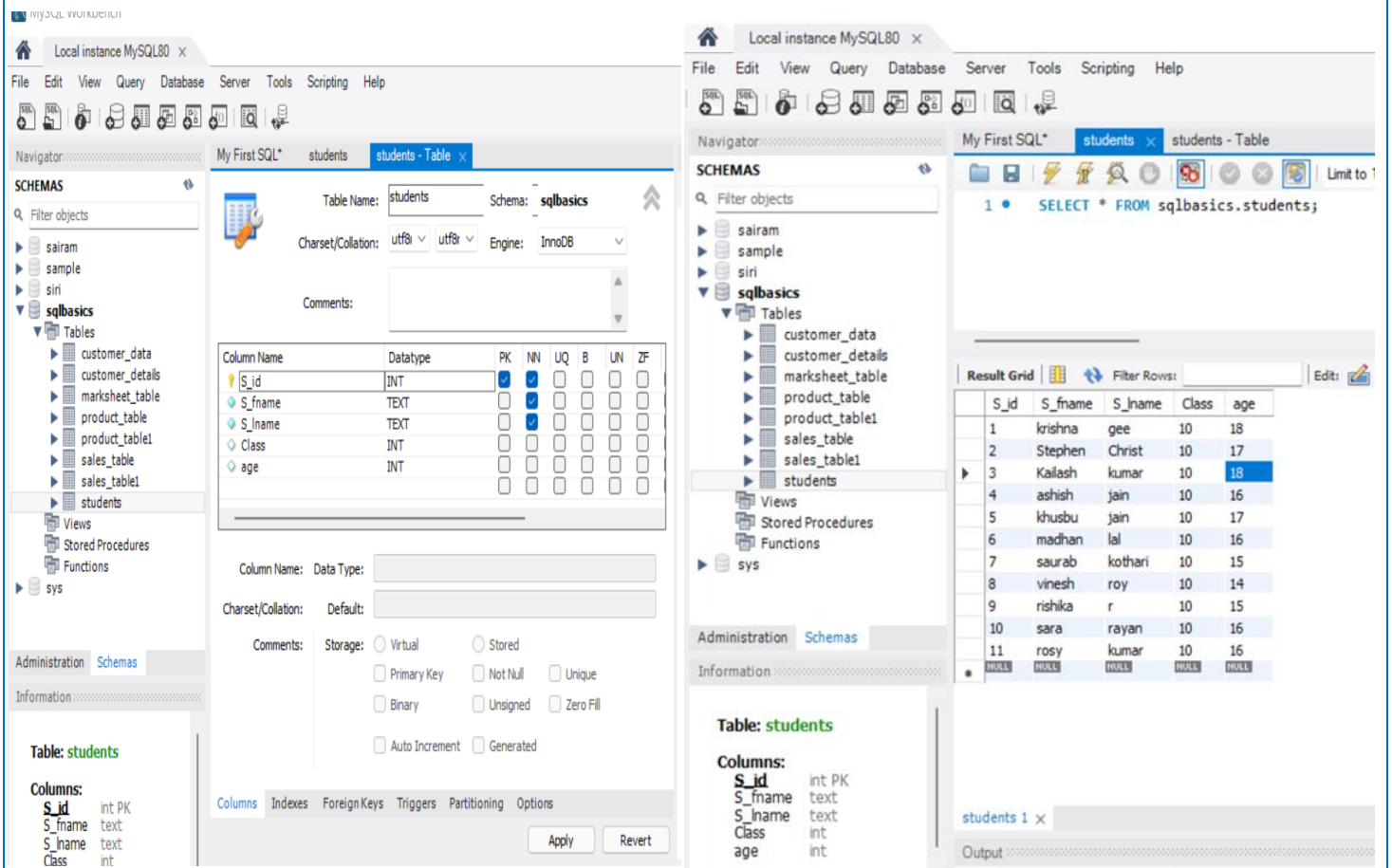
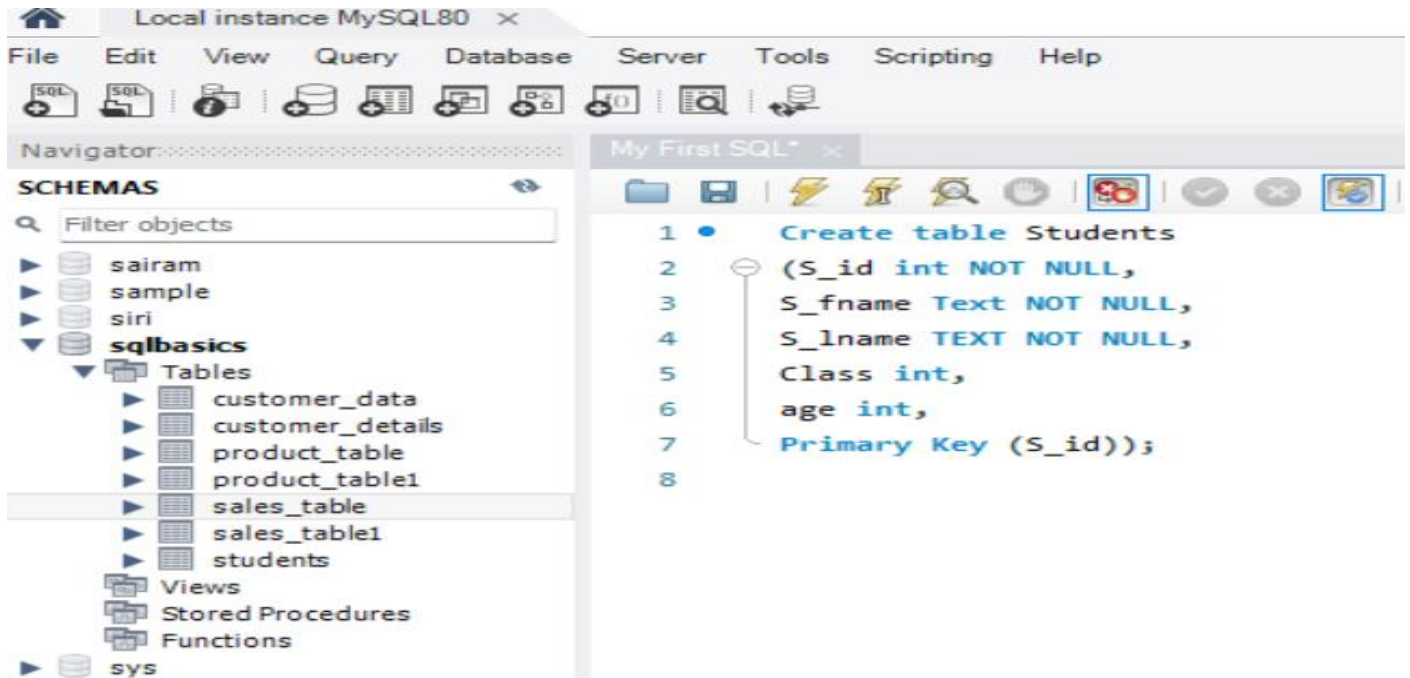
COURSE 4:

SQLTRAINING PRACTICE PROJECT

6.8

School Ranking Analysis

1. Write a query to create a **students** table with appropriate data types for student id, student first name, student last name, class, and age where the student's last name, student first name, and student id should be a **NOT NULL constraint**, and the student id should be in a **primary key**.



2. Write a query to create a **marksheet** table that includes score, year, ranking, class, and student id.

The screenshot shows the MySQL Workbench interface. In the 'My First SQL*' window, a query is written to create a table named 'marksheet_table' with the following columns: Score (int), Year (int), Ranking (int), Class (int), and S_id (int). The 'Navigator' pane on the left shows the 'sqlbasics' schema with a list of tables including 'marksheet_table'. The 'Result Grid' at the bottom shows the table structure with columns: Score, Year, Ranking, Class, S_id.

```

1 Create Table Marksheet_Table
2 (Score int,
3  Year int,
4  Ranking int,
5  Class int,
6  S_id int);
7

```

3. Write a query to **insert** values in **students** and **marksheet** tables.

The screenshot shows the MySQL Workbench interface with two queries. The first query, 'SELECT * FROM sqlbasics.marksheet_table;', displays the data in the 'marksheet_table'. The second query, 'SELECT * FROM sqlbasics.students;', displays the data in the 'students' table. The 'Result Grid' for the first query shows the following data:

| Score | Year | Ranking | Class | S_id |
|-------|------|---------|-------|------|
| 989 | 2014 | 10 | 1 | 1 |
| 454 | 2014 | 10 | 10 | 2 |
| 880 | 2014 | 10 | 4 | 3 |
| 870 | 2014 | 10 | 5 | 4 |
| 720 | 2014 | 10 | 7 | 5 |
| 670 | 2014 | 10 | 8 | 6 |
| 900 | 2014 | 10 | 3 | 7 |
| 540 | 2014 | 10 | 9 | 8 |
| 801 | 2014 | 10 | 6 | 9 |
| 420 | 2014 | 10 | 11 | 10 |
| 970 | 2014 | 10 | 2 | 11 |
| 720 | 2014 | 10 | 12 | 12 |

The 'Result Grid' for the second query shows the data in the 'students' table:

| S_id | S_fname | S_name | Class | age |
|------|---------|---------|-------|------|
| 1 | krishna | gee | 10 | 18 |
| 2 | Stephen | Christ | 10 | 17 |
| 3 | Kailash | kumar | 10 | 18 |
| 4 | ashish | jain | 10 | 16 |
| 5 | khusbu | jain | 10 | 17 |
| 6 | madhan | lal | 10 | 16 |
| 7 | saarab | kothari | 10 | 15 |
| 8 | vinesh | roy | 10 | 14 |
| 9 | rishika | r | 10 | 15 |
| 10 | sara | rayan | 10 | 16 |
| 11 | rosy | kumar | 10 | 16 |
| 12 | NULL | NULL | NULL | NULL |

The 'Table: students' section shows the columns: S_id (int PK).

4. Write a query to display student id and student first name from the student table if the age is greater than or equal to 16 and the student's last name is Kumar.

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator: SCHEMAS

Filter objects

sairam sample siri sqlbasics

Tables

customer_data customer_details marksheet_table product_table product_table1 sales_table sales_table1 students

Views Stored Procedures Functions

My First SQL* students x

```
1 Select S_id, S_fname from Students
2 where S_lname like '%Kumar'
3 and age >=16
```

Result Grid

| | S_id | S_fname |
|---|------|---------|
| ▶ | 3 | Kailash |
| | 11 | rosy |
| • | NULL | NULL |

5. Write a query to display all the details from the marksheet table if the score is between 800 and 1000.

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator: SCHEMAS

Filter objects

sairam sample siri sqlbasics

Tables

customer_data customer_details marksheet_table product_table product_table1 sales_table sales_table1 students

Views Stored Procedures Functions

sys

Administration Schemas

My First SQL* students x

```
1 Select * from Marksheet_Table
2 where score between 800 and 1000
```

Result Grid

| | Score | Year | Ranking | Class | S_id |
|---|-------|------|---------|-------|------|
| ▶ | 989 | 2014 | 10 | 1 | 1 |
| | 880 | 2014 | 10 | 4 | 3 |
| | 870 | 2014 | 10 | 5 | 4 |
| | 900 | 2014 | 10 | 3 | 7 |
| | 801 | 2014 | 10 | 6 | 9 |
| | 970 | 2014 | 10 | 2 | 11 |

Marksheet_Table 4 x Read Only

6. Write a query to display the marksheet details from the marksheet table by adding 5 to the score and by naming the column as new score.

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with 'sqlbasics' selected. The main query editor contains the following SQL query:

```
1 • SELECT * FROM sqlbasics.marksheet_table;
```

The 'Result Grid' shows the following data:

| New_Score | Year | Ranking | Class | S_id |
|-----------|------|---------|-------|------|
| 994 | 2014 | 10 | 1 | 1 |
| 459 | 2014 | 10 | 10 | 2 |
| 885 | 2014 | 10 | 4 | 3 |
| 875 | 2014 | 10 | 5 | 4 |
| 725 | 2014 | 10 | 7 | 5 |
| 675 | 2014 | 10 | 8 | 6 |
| 905 | 2014 | 10 | 3 | 7 |
| 545 | 2014 | 10 | 9 | 8 |
| 806 | 2014 | 10 | 6 | 9 |
| 425 | 2014 | 10 | 11 | 10 |
| 975 | 2014 | 10 | 2 | 11 |
| 725 | 2014 | 10 | 12 | 12 |

The bottom status bar indicates 'Table: marksheet_table' and 'Columns: New_Score int, Year int'.

7. Write a query to display the marksheet table in descending order of the score.

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with 'sqlbasics' selected. The main query editor contains the following SQL query:

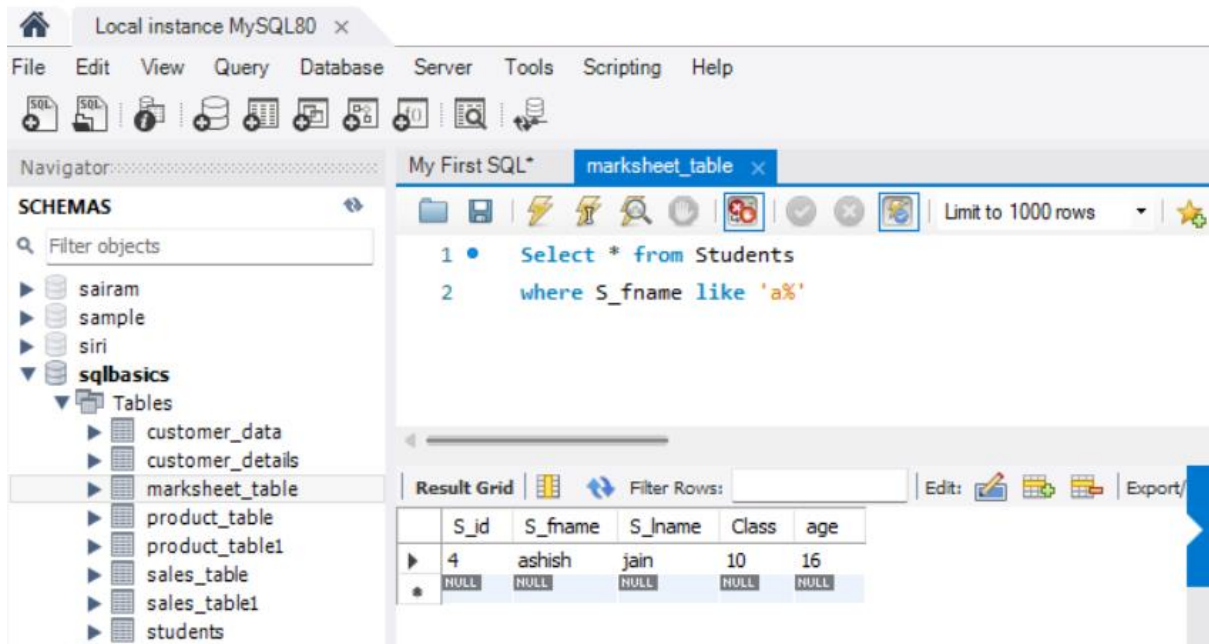
```
1 Select * from Marksheet_Table
2 Order by New_Score desc;
```

The 'Result Grid' shows the following data, sorted by New_Score in descending order:

| New_Score | Year | Ranking | Class | S_id |
|-----------|------|---------|-------|------|
| 994 | 2014 | 10 | 1 | 1 |
| 975 | 2014 | 10 | 2 | 11 |
| 905 | 2014 | 10 | 3 | 7 |
| 885 | 2014 | 10 | 4 | 3 |
| 875 | 2014 | 10 | 5 | 4 |
| 806 | 2014 | 10 | 6 | 9 |
| 725 | 2014 | 10 | 7 | 5 |
| 725 | 2014 | 10 | 12 | 12 |
| 675 | 2014 | 10 | 8 | 6 |
| 545 | 2014 | 10 | 9 | 8 |
| 459 | 2014 | 10 | 10 | 2 |
| 425 | 2014 | 10 | 11 | 10 |

The bottom status bar indicates 'Table: marksheet_table' and 'Columns: New_Score int, Year int'.

8. Write a query to display details of the students whose **first name starts with a**.



The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with 'sqlbasics' expanded, showing a list of tables including 'marksheet_table'. The main editor window, titled 'My First SQL*', contains the following SQL query:

```
1 • Select * from Students
2   where S_fname like 'a%'
```

Below the query editor, the 'Result Grid' tab is active, displaying the results of the query. The grid has columns for S_id, S_fname, S_lname, Class, and age. The results are as follows:

| | S_id | S_fname | S_lname | Class | age |
|---|------|---------|---------|-------|------|
| ▶ | 4 | ashish | jain | 10 | 16 |
| * | NULL | NULL | NULL | NULL | NULL |

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