SQL Training

Self learning completed: 41% | Projects completed: 0

Notes Help

Learning Track

Practice Labs

Certificate

Learning Track

Self learning
41% Completed

Assessments

Reference Materials

- Lab Guide
- Lesson-End Project Solutions
- EBooks
- US Crime Data Exploration and Analysis Dataset
- Datasets

School Ranking Analysis:

Description

Consider an institution that wants to store the students' details and their marks records to track their progress. The database would contain the students' information, marks of the students with the rank that can be viewed, updated, and evaluated for the performance evaluation.

Objective:

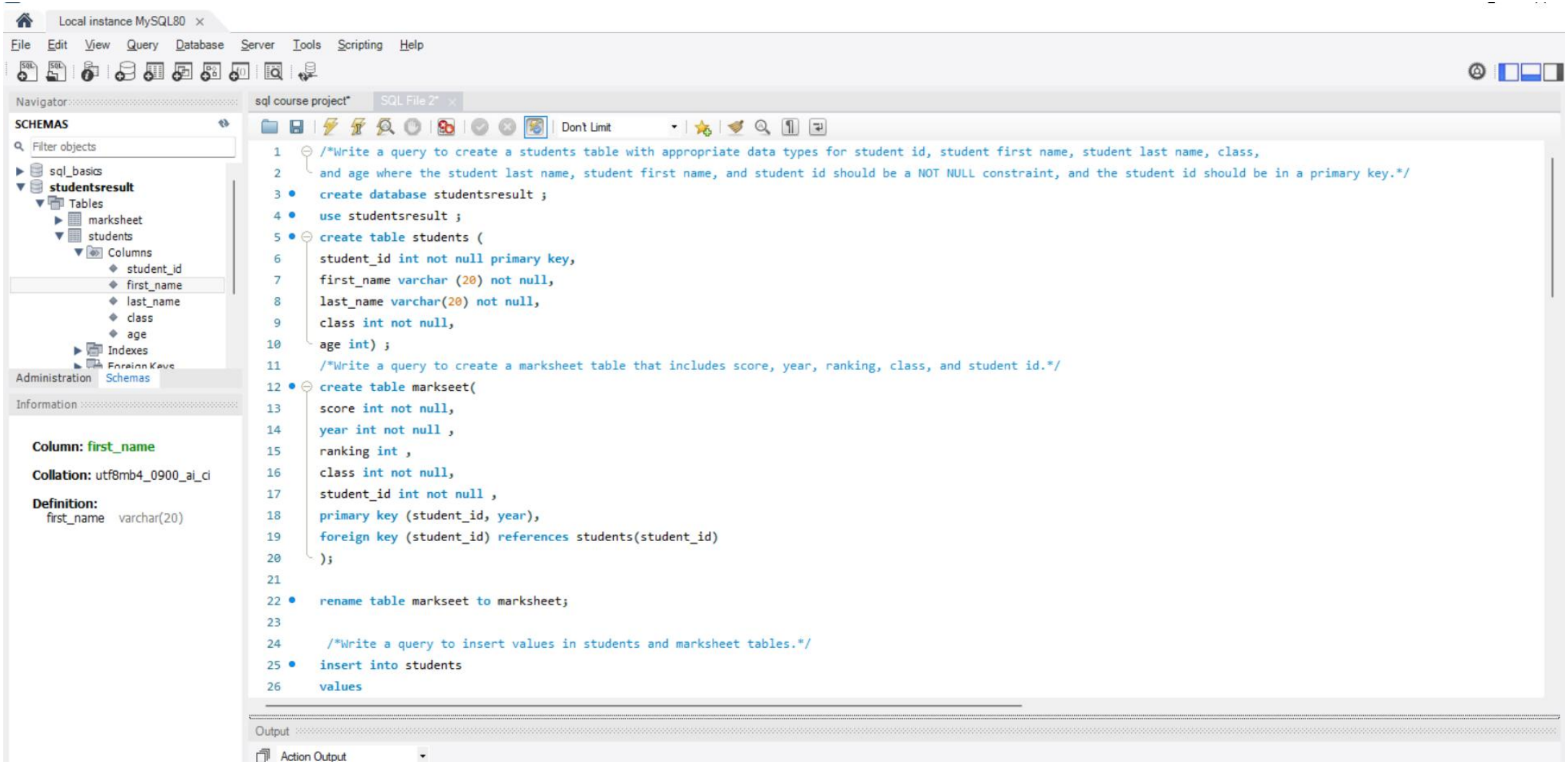
The design of the database helps to easily retrieve thousands of student records.

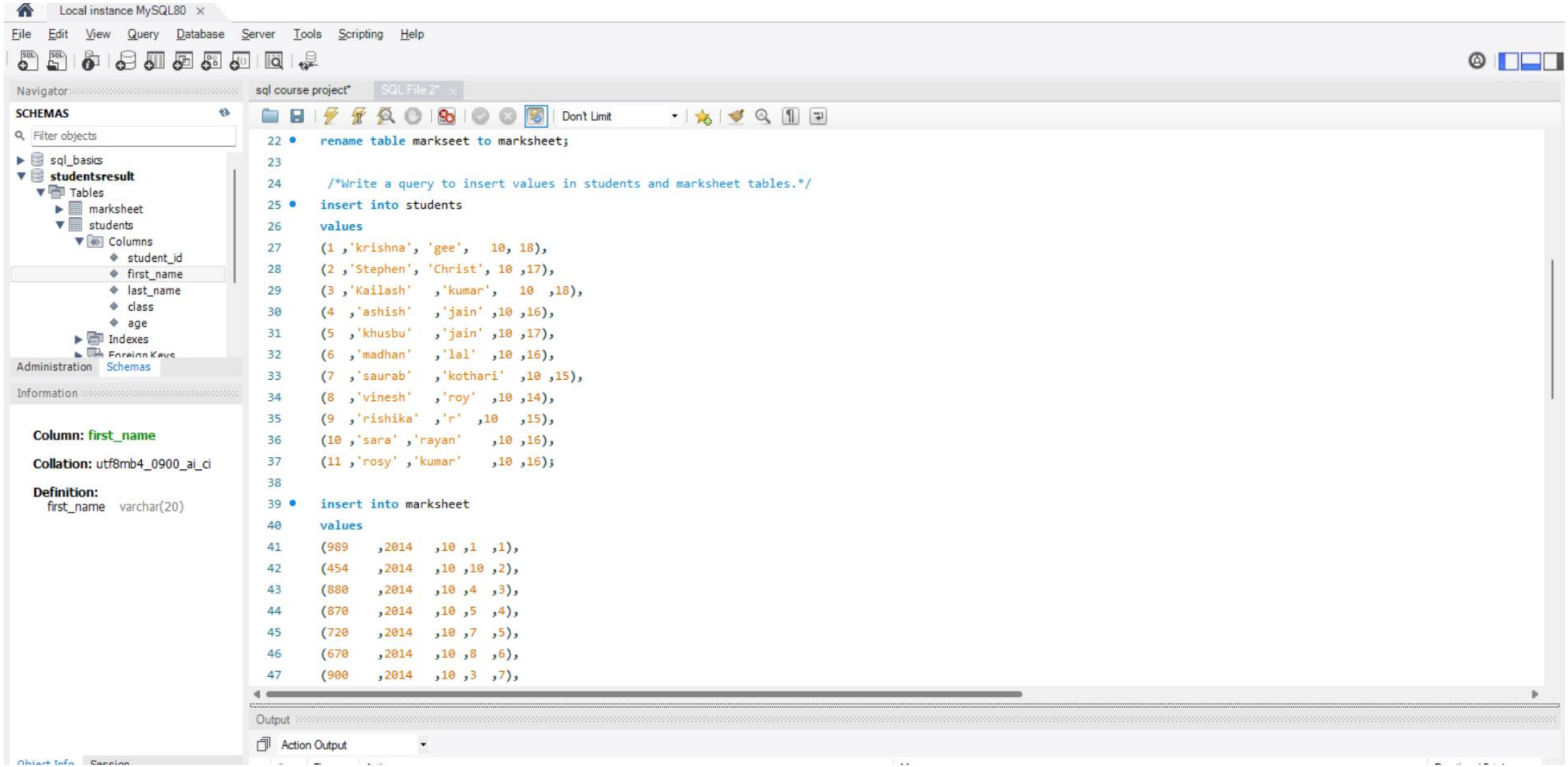
Task to be performed:

- 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 last name, student first name, and student id should be a **NOT NULL constraint**, and the student id should be in a **primary key**.
- Write a query to create a **marksheet** table that includes score, year, ranking, class, and student id.
- Write a query to **insert** values in **students** and **marksheet** tables.
- 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.**
- Write a query to display all the details from the marksheet table **if the score is between 800 and 1000.**
- 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**.
- Write a query to display the marksheet table in **descending order of the score**.
- Write a query to display details of the students whose **first name starts with a.**

You can download the datasets from here -

Submit


Local instance MySQL80
File Edit View Query Database Server Tools Scripting Help
Navigator
SCHEMAS
Filter objects
sql_basics
studentsresult
Tables
marksheet
students
Columns
student_id
first_name
last_name
class
age
Indexes
Administration Schemas
Information
Column: first_name
Collation: utf8mb4_0900_ai_ci
Definition:
first_name varchar(20)
sql course project*
SQL File 2*
Don't Limit
1 /*Write a query to create a students table with appropriate data types for student id, student first name, student last name, class,
2 and age where the student last name, student first name, and student id should be a NOT NULL constraint, and the student id should be in a primary key.*/
3 create database studentsresult ;
4 use studentsresult ;
5 create table students (
6 student_id int not null primary key,
7 first_name varchar (20) not null,
8 last_name varchar(20) not null,
9 class int not null,
10 age int) ;
11 /*Write a query to create a marksheet table that includes score, year, ranking, class, and student id.*/
12 create table markseet(
13 score int not null,
14 year int not null ,
15 ranking int ,
16 class int not null,
17 student_id int not null ,
18 primary key (student_id, year),
19 foreign key (student_id) references students(student_id)
20);
21
22 rename table markseet to marksheet;
23
24 /*Write a query to insert values in students and marksheet tables.*/
25 insert into students
26 values
Output
Action Output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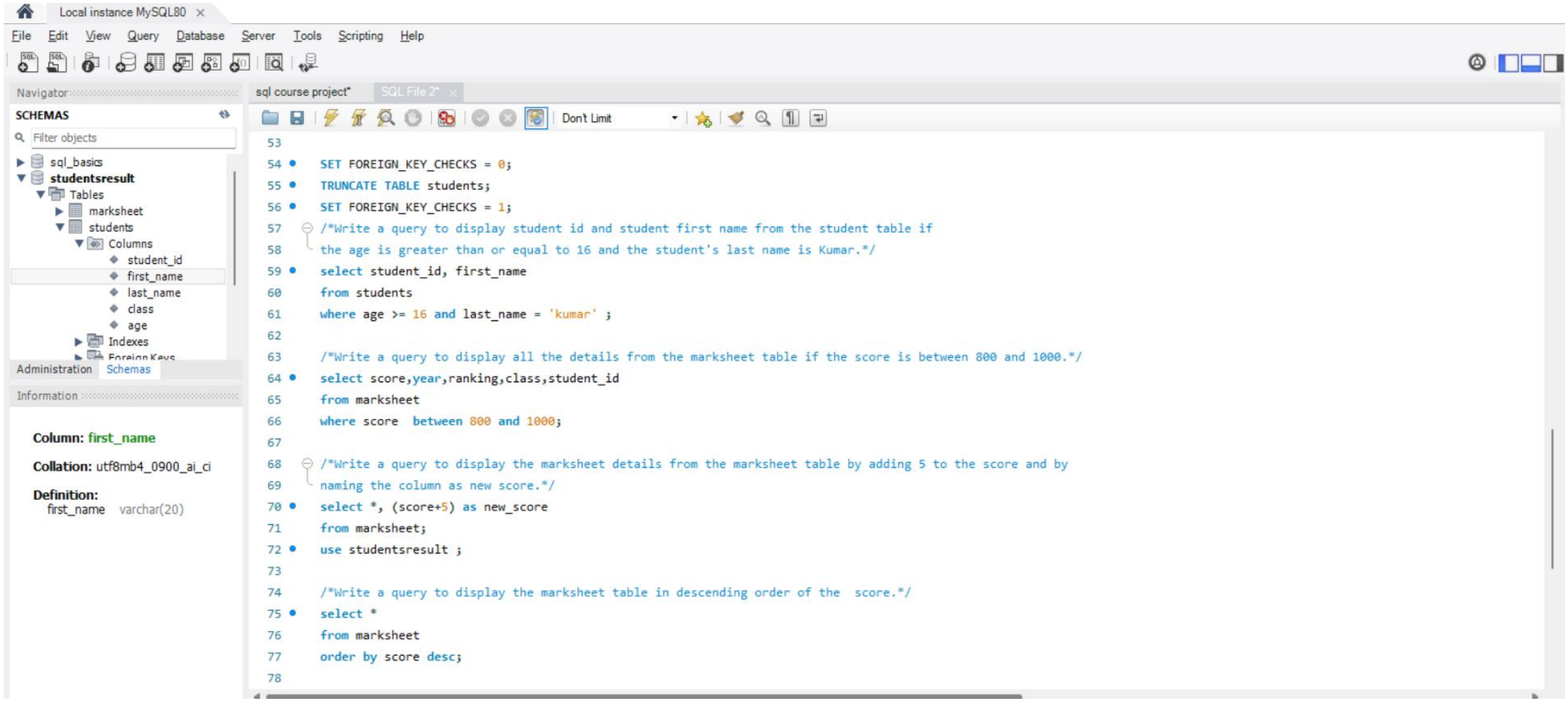
Collation: utf8mb4_0900_ai_ci
Definition:
first_name varchar(20)
sql course project*
SQL File 2*
Don't Limit
22 rename table markseet to marksheet;
24 /*Write a query to insert values in students and marksheet tables.*/
25 insert into students
26 values
27 (1 ,'krishna', 'gee', 10, 18),
28 (2 ,'Stephen', 'Christ', 10 ,17),
29 (3 ,'Kailash' ,'kumar', 10 ,18),
30 (4 ,'ashish' ,'jain' ,10 ,16),
31 (5 ,'khusbu' ,'jain' ,10 ,17),
32 (6 ,'madhan' ,'lal' ,10 ,16),
33 (7 ,'saurab' ,'kothari' ,10 ,15),
34 (8 ,'vinesh' ,'roy' ,10 ,14),
35 (9 ,'rishika' ,'r' ,10 ,15),
36 (10 ,'sara' ,'rayan' ,10 ,16),
37 (11 ,'rosy' ,'kumar' ,10 ,16);
39 insert into marksheet
40 values
41 (989 ,2014 ,10 ,1 ,1),
42 (454 ,2014 ,10 ,10 ,2),
43 (880 ,2014 ,10 ,4 ,3),
44 (870 ,2014 ,10 ,5 ,4),
45 (720 ,2014 ,10 ,7 ,5),
46 (670 ,2014 ,10 ,8 ,6),
47 (900 ,2014 ,10 ,3 ,7),
Output
Action Output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Collation: utf8mb4_0900_ai_ci
Definition:
first_name varchar(20)
sql course project*
SQL File 2*
Don't Limit
53
54 SET FOREIGN_KEY_CHECKS = 0;
55 TRUNCATE TABLE students;
56 SET FOREIGN_KEY_CHECKS = 1;
57 /*Write a query to display student id and student first name from the student table if
58 the age is greater than or equal to 16 and the student's last name is Kumar.*/
59 select student_id, first_name
60 from students
61 where age >= 16 and last_name = 'kumar' ;
62
63 /*Write a query to display all the details from the marksheet table if the score is between 800 and 1000.*/
64 select score,year,ranking,class,student_id
65 from marksheet
66 where score between 800 and 1000;
67
68 /*Write a query to display the marksheet details from the marksheet table by adding 5 to the score and by
69 naming the column as new score.*/
70 select *, (score+5) as new_score
71 from marksheet;
72 use studentsresult ;
73
74 /*Write a query to display the marksheet table in descending order of the score.*/
75 select *
76 from marksheet
77 order by score desc;
78