SQL Practice Project -2 submitted by Sujit Sonar:

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**.

```
create table students
  4 ⊝ (student id int not null primary key,
  5
        first_name varchar(225) not null,
  6
        last_name varchar(225) not null,
  7
        class varchar(100),
  8
        age int) engine = InnoDB;
  q
esult Grid 🎚 Filter Rows: 🔍
                                       Export: Wrap Cell Content: IA
   Field
            Type
                        Null Key Default Extra
   studen... int
                        NO PRI
   first n... varchar(225) NO
   last na... varchar(225) NO
                                 NULL
   class varchar(100) YES
                                 NULL
                       YES
   age
```

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

```
create table marksheet
  13 \ominus (score int,
  14
         year int,
  15
         class varchar(100),
  16
         ranking int.
  17
         s id int) engine = InnoDB;
Result Grid 🎚 Filter Rows: 🔾
                                         Export: Wrap Cell Content: I
#
   Field
                          Null Key Defaull Extra
              Type
1 score
             int
                          YES
                                    NULL
   year
                          YES
                                    NULL
2
             int
3
             varchar(100) YES
   class
                                    NULL
    ranking int
                          YES
                                    HULL
   s id
                          YES
                                    NULL
             int
```

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

Inserting values into students table:

```
insert into SQL_basics.students
       (student id, first name, last name, class, age)
26
      values
      (1, 'krishna', 'gee', '10', 18),
      (2, 'stephen', 'christ', '10', 17),
28
      (3, 'kailash', 'kumar', '10', 18),
       (4, 'ashish', 'jain', '10', 16),
30
      (5, 'khusbu', 'jain', '10', 17),
31
      (6, 'madhan', 'lal', '10', 16),
32
33
      (7, 'saurab', 'kothari', '10', 15),
34
      (8, 'vinesh', 'roy', '10', 14),
      (9, 'rishika', 'r', '10', 15),
35
      (10, 'sara', 'ryan', '10', 16),
      (11, 'rosy', 'kumar', '10', 16);
37
  39 • select * from students;
Result Grid 🏥 🙌 Filter Rows: 🔾
                                       Edit:
# student_ic first_name last_name class age
            krishna
                     gee
2 2
            stephen
                     christ
                              10
                                   17
3
  3
            kailash
                     kumar
                              10
                                   18
4
  4
            ashish
                     iain
                              10
                                   16
5
   5
            khusbu
                     jain
                              10
                                   17
            madhan
            saurab
                      kothari
                              10
                                   15
  8
            vinesh
                     roy
                              10
                                   14
            rishika
                              10
                                   15
10 10
            sara
                      ryan
                              10
                                   16
            rosy
                      kumar
```

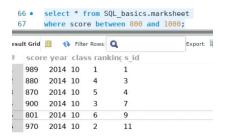
Inserting values into marksheet table:

```
insert into SQL_basics.marksheet
   (score, year, class, ranking, s_id)
   values
   (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',11,12);
 58 • select * from marksheet;
esult Grid 🎚 🙌 Filter Rows: 🔾
  score year class ranking s_id
  989 2014 10 1
                       1
  454 2014 10
                10
  880
       2014 10
                 4
                       3
  870 2014 10
                5
  720
       2014 10
                 7
  670 2014 10
  900
       2014 10
  540 2014 10
  801
       2014 10
                 6
  420 2014 10
                11
                       10
  970 2014 10
                2
                       11
.2 720 2014 10
                11
                       12
```

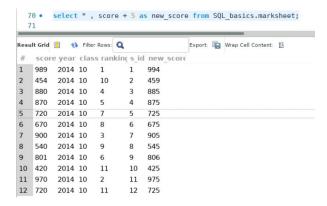
• Write a query to display student id and student first name from the student table if the age is greater than or equal to 16 and the student's last name is Kumar.



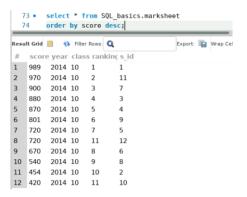
• Write a query to display all the details from the marksheet table **if the score is between 800** and 1000.



• 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.**

