**Data Testing Assessment**

A school 'Study & Play' has different branches in India. Students appeared in 10th & 12th board have scored good marks in different subjects. 'Study & Play' wants to recognize teachers across different streams to award them for their student's performance.

'Student & Play' are looking for a data warehouse solution to do analysis on student performance in a particular branch or subject.

**Exercise -**

As a part of this exercise, use the below Student data to import in database table.

Sample Data –

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Student Name | StudentRollNo | Class | Age | Father's Name |
| AJAY KUMAR | IETLINF01 | X | 16 | PREM KUMAR |
| RAJAT MISHRA | IETLINF02 | XI | 17 | PANKAJ MISHRA |
| SUDHEER SHARMA | IETLINF03 | IX | 15 | SUNDER SHARMA |
| NANCY KAUR | IETLINF04 | XII | 18 | AK SINGH |
| SUMITA SHARMA | IETLINF05 | IV | 14 | AJAY SHARMA |
| NANDINI GUPTA | IETLINF06 | VII | 18 | RAM GUPTA |
| RAM KUMAR | IETLINF07 | X | 16 | RAMAN KUMAR |

Tasks

1. Create above table in database and insert the data.
2. Write sql query to find out total number of students in each class.
3. Write sql query to find out average age of students in each class.
4. Write sql query to find out the number of students having same roll no.
5. Write sql query to view the duplicate name of a student from the table.

**Solution :**

1. **Create above table in database and insert the data.**

Create table Student\_Data

(StudentName varchar2(100) not null, StudentRollNo varchar2(100), StudentClass varchar2(50) not null, Age number, Father\_Name varchar2(100) not null);

Insert into Student\_Data(StudentName, StudentRollNo, StudentClass, Age, Father\_Name)

values ('AJAY KUMAR', 'IETLINF01', 'X', 16, 'PREM KUMAR');

Insert into Student\_Data

values ('RAJAT MISHRA', 'IETLINF02', 'XI', 17, 'PANKAJ MISHRA');

Insert into Student\_Data

values ('SUDHEER SHARMA', 'IETLINF03', 'IX', 15, 'SUNDER SHARMA');

Insert into Student\_Data

values ('NANCY KAUR', 'IETLINF04', 'XII', 18, 'AK SINGH');

Insert into Student\_Data

values ('SUMITA SHARMA', 'IETLINF05', 'IV', 14, 'AJAY SHARMA');

Insert into Student\_Data

values ('NANDINI GUPTA', 'IETLINF06', 'VII', 18, 'RAM GUPTA');

Insert into Student\_Data

values ('RAM KUMAR', 'IETLINF07', 'X', 16, 'RAMAN KUMAR');

Select \* from Student\_Data;

1. **Write sql query to find out total number of students in each class.**

SELECT StudentClass as ClassOfStudent, count( \* ) as Total\_Students FROM Student\_Data

Group By StudentClass;

1. **Write sql query to find out average age of students in each class.**

SELECT StudentClass as ClassOfStudent, AVG(Age) as Average\_Age FROM Student\_Data

Group By StudentClass;

1. **Write sql query to find out the number of students having same roll no.**

Select Count(\*), StudentRollNo

From Student\_Data

Group by StudentRollNo

Having count(\*)>1;

1. **Write sql query to view the duplicate name of a student from the table.**

Select Count(\*), StudentName

From Student\_Data

Group by StudentName

Having count(\*)>1;