

## Data Analytics Olympiad Exam Project

We conduct Olympiad exam for our partner schools every year to evaluate the standard of the students. Here we have provided you with the sample data for the exam. To get a proper insight about the exam you need all the 4 tables, data for all those 4 tables are given in the csv file.

### List of tables:

1. Student\_list
2. Student\_response
3. Correct\_answers
4. Question\_paper\_code

- ⇒ **Table 1:** student\_list - List of students who attended the Olympiad exam from Google Public School.
- ⇒ **Table 2:** student\_response - The Learn Basics Olympiad is an objective exam, student response for every question was recorded in this table.
- 5 options ('A', 'B', 'C', 'D' and 'E') are provided for each question
  - Out of 5 options only 'A', 'B', 'C' and 'D' are the valid options, students can pick 'E' option when they think they haven't learnt the concept yet.
- ⇒ **Table 3:** correct\_answers - This table has the correct answer for all the questions in math and science.
- ⇒ **Table 4:** question\_paper\_code - Since we are dealing with 3 classes and 2 subjects, we are maintaining a separate question paper code for each class and each subject.

### Required output of task 1:

Now, the objective is to validate the student response and present it in a single table with list of columns mentioned below using SQL.

Required output table with column data,

OUTPUT_TABLE_COLUMN_NAMES
Roll_number
Student_name
Class
Section
School_name
Math_correct
Math_wrong
Math_yet_to_learn
Math_score
Math_percentage
Science_correct
Science_wrong
Science_yet_learn
Science_score
Science_percentage

Expected Output (only few records shown):

	roll_number integer	student_name character varying (50)	class integer	section character varying (20)	school_name character varying (50)	math_correct bigint	math_wrong bigint	math_yet_to_learn bigint	math_score bigint	math_percentage numeric	science_correct bigint	science_wrong bigint	science_yet_to_learn bigint	science_score bigint	science_percentage numeric
1	10159	Ada	8	A	Google Public School	4	28	8	4	10.00	11	38	11	11	18.33
2	10114	Dominik	7	B	Google Public School	7	24	9	7	17.50	13	35	12	13	21.67
3	10215	Adelaide	8	C	Google Public School	11	25	4	11	27.50	9	42	9	9	15.00
4	10052	Shridevi	6	B	Google Public School	9	26	5	9	22.50	15	34	11	15	25.00
5	10201	Elian	8	B	Google Public School	9	26	5	9	22.50	17	31	12	17	28.33
6	10033	Arnav	6	B	Google Public School	5	26	9	5	12.50	9	39	12	9	15.00
7	10205	Florrie	8	B	Google Public School	6	27	7	6	15.00	15	35	10	15	25.00
8	10120	Kate	7	B	Google Public School	8	24	8	8	20.00	11	33	16	11	18.33
9	10179	Marcus	8	A	Google Public School	8	20	12	8	20.00	5	40	15	5	8.33
10	10058	Arpana	6	C	Google Public School	8	26	6	8	20.00	13	32	15	13	21.67
11	10203	Fenton	8	B	Google Public School	6	23	11	6	15.00	12	39	9	12	20.00
12	10123	Lana	7	B	Google Public School	10	20	10	10	25.00	13	37	10	13	21.67
13	10066	Wade	6	C	Google Public School	10	10	11	10	25.00	11	37	13	11	18.33