Data Analytics Intern – Task 1

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.
   o 5 options ("A', 'B', 'C, 'D' and 'E') are provided for each question
   o 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	10065	Kuntala	6	C	Google Public School	10	19	11	10	25.00	11	37	12	11	18.33