

**SQL query to extract and calculate students' test scores to analyse further based on 4 tables namely student\_list, student\_response, correct\_response and question\_papaer\_code:**

```
SELECT student_list.roll_number roll_number, student_name, class, section, school_name,
math_correct_tb.math_correct math_correct, math_wrong_tb.math_wrong math_wrong,
math_yet_to_learn_tb.math_yet_to_learn math_yet_to_learn,
math_score_tb.math_score_out_of_40 math_score_out_of_40,
math_percentage_tb.math_percentage math_percentage, science_correct_tb.science_correct
science_correct, science_wrong_tb.science_wrong science_wrong,
science_yet_to_learn_tb.science_yet_to_learn science_yet_to_learn,
science_score_tb.science_score_out_of_60 science_score_out_of_60,
science_percentage_tb.science_percentage science_percentage FROM student_list
```

LEFT JOIN

```
(SELECT roll_number ,COUNT(*) math_correct FROM student_response INNER JOIN correct_answer
ON student_response.question_paper_code = correct_answer.question_paper_code WHERE
student_response.question_paper_code IN (101,102,103) AND student_response.option_marked =
correct_answer.correct_option AND student_response.question_number =
correct_answer.question_number AND student_response.question_paper_code =
correct_answer.question_paper_code GROUP BY student_response.roll_number) math_correct_tb
ON student_list.roll_number= math_correct_tb.roll_number
```

LEFT JOIN

```
(SELECT roll_number ,COUNT(*) math_wrong FROM student_response INNER JOIN correct_answer
ON student_response.question_paper_code = correct_answer.question_paper_code WHERE
student_response.question_paper_code IN (101,102,103) AND student_response.option_marked !=
correct_answer.correct_option AND student_response.question_number =
correct_answer.question_number AND student_response.question_paper_code =
correct_answer.question_paper_code AND student_response.option_marked != 'e' GROUP BY
student_response.roll_number) math_wrong_tb ON student_list.roll_number=
math_wrong_tb.roll_number
```

LEFT JOIN

```
(SELECT roll_number ,COUNT(*) math_yet_to_learn FROM student_response WHERE
question_paper_code IN (101,102,103) AND student_response.option_marked = 'e' GROUP BY
roll_number) math_yet_to_learn_tb ON
student_list.roll_number=math_yet_to_learn_tb.roll_number
```

LEFT JOIN

```
(SELECT roll_number ,COUNT(*) math_score_out_of_40 FROM student_response INNER JOIN
correct_answer ON student_response.question_paper_code =
correct_answer.question_paper_code WHERE student_response.question_paper_code IN
(101,102,103) AND student_response.option_marked = correct_answer.correct_option AND
student_response.question_number = correct_answer.question_number AND
student_response.question_paper_code = correct_answer.question_paper_code GROUP BY
```

student\_response.roll\_number) math\_score\_tb ON  
student\_list.roll\_number=math\_score\_tb.roll\_number

LEFT JOIN

(SELECT roll\_number ,COUNT(\*)\*100/ (SELECT COUNT(\*) FROM correct\_answer WHERE  
correct\_answer.question\_paper\_code IN (101,102,103) GROUP BY  
correct\_answer.question\_paper\_code LIMIT 1) math\_percentage FROM student\_response INNER  
JOIN correct\_answer ON student\_response.question\_paper\_code =  
correct\_answer.question\_paper\_code WHERE student\_response.question\_paper\_code IN  
(101,102,103) AND student\_response.option\_marked = correct\_answer.correct\_option AND  
student\_response.question\_number = correct\_answer.question\_number AND  
student\_response.question\_paper\_code = correct\_answer.question\_paper\_code GROUP BY  
student\_response.roll\_number) math\_percentage\_tb ON  
student\_list.roll\_number=math\_percentage\_tb.roll\_number

LEFT JOIN

(SELECT roll\_number ,COUNT(\*) science\_correct FROM student\_response INNER JOIN  
correct\_answer ON student\_response.question\_paper\_code =  
correct\_answer.question\_paper\_code WHERE student\_response.question\_paper\_code IN  
(501,502,503) AND student\_response.option\_marked = correct\_answer.correct\_option AND  
student\_response.question\_number = correct\_answer.question\_number AND  
student\_response.question\_paper\_code = correct\_answer.question\_paper\_code GROUP BY  
student\_response.roll\_number) science\_correct\_tb ON  
student\_list.roll\_number=science\_correct\_tb.roll\_number

LEFT JOIN

(SELECT roll\_number ,COUNT(\*) science\_wrong FROM student\_response INNER JOIN  
correct\_answer ON student\_response.question\_paper\_code =  
correct\_answer.question\_paper\_code WHERE student\_response.question\_paper\_code IN  
(501,502,503) AND student\_response.option\_marked != correct\_answer.correct\_option AND  
student\_response.question\_number = correct\_answer.question\_number AND  
student\_response.question\_paper\_code = correct\_answer.question\_paper\_code AND  
student\_response.option\_marked != 'e' GROUP BY student\_response.roll\_number)  
science\_wrong\_tb ON student\_list.roll\_number=science\_wrong\_tb.roll\_number LEFT JOIN (SELECT  
roll\_number ,COUNT(\*) science\_yet\_to\_learn FROM student\_response WHERE  
question\_paper\_code IN (501,502,503) AND student\_response.option\_marked = 'e' GROUP BY  
roll\_number) science\_yet\_to\_learn\_tb ON student\_list.roll\_number =  
science\_yet\_to\_learn\_tb.roll\_number

LEFT JOIN

(SELECT roll\_number ,COUNT(\*) science\_score\_out\_of\_60 FROM student\_response INNER JOIN  
correct\_answer ON student\_response.question\_paper\_code =  
correct\_answer.question\_paper\_code WHERE student\_response.question\_paper\_code IN  
(501,502,503) AND student\_response.option\_marked = correct\_answer.correct\_option AND  
student\_response.question\_number = correct\_answer.question\_number AND  
student\_response.question\_paper\_code = correct\_answer.question\_paper\_code GROUP BY

student\_response.roll\_number) science\_score\_tb ON  
 student\_list.roll\_number=science\_score\_tb.roll\_number

LEFT JOIN

(SELECT roll\_number ,COUNT(\*)\*100/ (SELECT COUNT(\*) FROM correct\_answer WHERE  
 correct\_answer.question\_paper\_code IN (501,502,503) GROUP BY  
 correct\_answer.question\_paper\_code LIMIT 1) science\_percentage FROM student\_response INNER  
 JOIN correct\_answer ON student\_response.question\_paper\_code =  
 correct\_answer.question\_paper\_code WHERE student\_response.question\_paper\_code IN  
 (501,502,503) AND student\_response.option\_marked = correct\_answer.correct\_option AND  
 student\_response.question\_number = correct\_answer.question\_number AND  
 student\_response.question\_paper\_code = correct\_answer.question\_paper\_code GROUP BY  
 student\_response.roll\_number) science\_percentage\_tb ON  
 student\_list.roll\_number=science\_percentage\_tb.roll\_number

Preview of output table:

<div> <div>HomeWorkspace - 1Yashdip_Hande_Outp... X</div> <div>Premium Trial - 12 days leftUPGRADE</div> </div>														
<div> <div>create</div> <div>Yashdip_Hande_Output_1</div> <div>Edit Design+Share</div> </div>														
<div> <div>FilterSortAddMore</div> <div>Search Data</div> </div>														
#	roll_number	student_name	#	class	T	section	T	school_name	#	math_correct	#	math_wrong	#	math_score_out_c
1	10001	Abhijit		6	A			Google Public School		5		27	8	5
2	10002	Aghat		6	A			Google Public School		10		25	5	10
3	10003	Amitava Chandar		6	A			Google Public School		9		22	9	9
4	10004	Anbarasu		6	A			Google Public School		6		23	11	6
5	10005	Atralarasu		6	A			Google Public School		8		25	7	8
6	10006	Ayog		6	A			Google Public School		8		24	8	8
7	10007	Bhishma		6	A			Google Public School		7		26	7	7
8	10008	Dwaipayan		6	A			Google Public School		6		28	6	6
9	10009	Ekalinga		6	A			Google Public School		8		25	7	8
10	10010	Gulfam		6	A			Google Public School		8		18	14	8
11	10011	Harjeet		6	A			Google Public School		7		27	6	7
12	10012	Ibhanan		6	A			Google Public School		5		28	7	5
13	10013	Irfan		6	A			Google Public School		7		27	6	