

Data Analyst - SQL Test

Assume that an online education platform has 3 tables on their database, each table on teachers, groups, and group sales, with samples of the data and columns as shown below.

Please write an SQL query for each of the following problems. Turn in all the code that you write, and clearly state any assumption that you make (if any).

Table 1: teachers

teacher_id	teacher_name	sign_up
1342564	Ayesha Malik	2022-05-09
1243789	Zain Ali	2022-04-14
1034752	Neha Afzal	2022-01-27
985673	Hassan Zafar	2021-12-08
1532246	Umm-e-Kulsoom	2022-08-21

Table 2: sales

transaction_id	payment_date	group_id	paid_amount
13243	2022-07-13	130966	4,000
10543	2022-07-28	132799	1,500
35432	2022-08-08	130966	4,000
23546	2022-09-28	143171	1,000
67525	2022-06-27	130966	4,000
85634	2022-07-10	131466	1,000

Table 3: groups

group_id	title	started_at	teacher_id
132799	PB-9 Maths	2022-07-04	1034752
130966	O-Level Physics	2022-06-24	985673
121777	O-Level Maths	2022-06-25	1234297
143171	KPK-10 Chemistry	2022-07-18	1313181
131466	SB-10 Physics	2022-07-04	1342564
136600	O-Level Chemistry	2022-06-24	1243789

1.
 - a. Find the highest and lowest selling groups by quantity during the month of July 2022.
 - b. Find the highest and lowest selling books by revenue during the month of July 2022.
 - c. If there are multiple possible groups with the same quantity or revenue, sort by teacher ID and then by starting date.

2. Find the top 3 highest selling groups by quantity from the month with the highest sales revenue, along with these authors' total sales revenue and sales quantity for that month.
3. If we were to have 1 table on sales that would have all the data from all 3 tables combined, how would you go about and write it?