| emp\_id | emp\_name | department | salary | hire\_date |
| --- | --- | --- | --- | --- |
| 1 | Alice | HR | 60000 | 2019-01-01 |
| 2 | Bob | IT | 80000 | 2017-06-15 |
| 3 | Charlie | Finance | 70000 | 2018-03-20 |
| 4 | David | IT | 90000 | 2016-11-10 |
| 5 | Emily | HR | 55000 | 2020-08-05 |

This table is a preview, you can imagine the real table contains more rows.

There are no right or wrong answers, this is just to test your sql and see if and how you can do them.

CTEs are preferred to sub/nested queries.

Use the SQL dialect you’re the most confident in.

Question 1:

Write a sql query to calculate the variation rate of the average salary of the employees who joined in 2016 versus the ones who joined in 2020.

question 2:

Calculate the percentage share of the total company salary for each department and rank the departments based on their share for each year.

We’ll be asking somewhat similar questions during the technical interview, so please, if you can’t answer them, be transparent and let me know.