

Table: Employees

Column Name	Type
emp_id	int
event_day	date
in_time	int
out_time	int

(emp_id, event_day, in_time) is the primary key of this table.

The table shows the employees' entries and exits in an office.

event_day is the day at which this event happened, in_time is the minute at which the employee entered the office, and out_time is the minute at which the employee exited the office. in_time and out_time are between 1 and 1440.

It is guaranteed that no two events on the same day intersect in time, and in_time < out_time.

Write an SQL query to calculate the total time in minutes spent by each employee on each day at the office. Note that within one day, an employee can enter and leave more than once. The time spent in the office for a single entry is out_time - in_time.

Return the result table in any order.

The query result format is in the following example.

Example 1:**

Input:

Employees table:

emp_id	event_day	in_time	out_time
1	2020-11-28	4	32
1	2020-11-28	55	200
1	2020-12-03	1	42
2	2020-11-28	3	33
2	2020-12-09	47	74

Output:

day	emp_id	total_time
2020-11-28	1	173
2020-11-28	2	30
2020-12-03	1	41

2020-12-09	2	27	
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Explanation:

Employee 1 has three events: two on day 2020-11-28 with a total of $(32 - 4) + (200 - 55) = 1$

Employee 2 has two events: one on day 2020-11-28 with a total of $(33 - 3) = 30$, and one on d