

Spring25-Assignment1 Simple Query

Question 1:

In the stations table, find the english_name of stations containing "EAST, WEST, NORTH, SOUTH" (including uppercase and lowercase letters) , such as Huaqiang North, Shenda West, Shenzhen West Station, etc., and output the content in the following format. The output results are sorted in ascending order by station_id.

在stations表格中找到英文名中带有“EAST, WEST, NORTH, SOUTH”(包含大小写)等地点方位的车站(如华强北，深大西，深圳西站等)，按如下格式输出内容。输出结果根据station_id升序排列。

	station_id	english_name	chinese_name
1	13	Qiaocheng East	侨城东
2	30	Airport East	机场东
3	39	Airport North	机场北
4	45	Hongshuwan South	红树湾南
5	47	Gangxia North	岗厦北
6	59	Qiaocheng North	侨城北
7	64	Xiangmei North	香梅北
8	66	Lianhua West	莲花西
9	68	Huaqiang North	华强北
10	102	Lianhua North	莲花北
11	106	Shenzhen North Station	深圳北站
12	112	Qinghu North	清湖北
13	124	Honglang North	洪浪北
14	155	Huaqiang South	华强南
15	158	Hongling North	红岭北

Question 2:

In the Station table, calculate the percentage of the total number of stations in Nanshan District, Futian District, and Luohu District is in the total number of all stations? Please give your answer with two decimal places and concatenate "%".

在Station表中，南山区、福田区、罗湖区的地铁站数量占地铁站总数量的百分比？答案请保留两位小数并拼接“%”。

	percentage
1	65.78%

Question 3:

Using the table **bus_lines**, which bus lines have more than 20 (included) stations, and how many stations they have, please output results in descending order

在bus_lines表中，拥有站数大于等于20站的公交线路有哪些，他们的车站数分别是多少站，按照降序排列输出结果。

	bus_line	cnt
1	N4	21
2	309	20
3	366	20

Question 4:

Find stations in each line whose num is 1 in the line_detail table, output the line id and the English name of the station, and sort the output results in ascending order by line_id.

在line_detail表中找到所有地铁线路中num为1的地铁站，输出地铁线id与该地铁站的英文名称，输出结果按照line_id 升序排列。

	line_id	english_name
1	1	Luohu
2	2	Chiwan
3	3	Yitian
4	4	Futian Checkpoint
5	5	Qianhaiwan
6	7	Xili Lake
7	9	Hanghai Road
8	11	Bitou

Question 5:

How many stations are there in Nanshan District that are not on No. 1 line?

在南山区的地铁站，但不在地铁一号线上的有多少个？

	count
1	40

Question 6:

Find the line with the largest number of stations. If multiple lines have the same number of stations, they should all be listed and returned as the following results, which are sorted in ascending order by line_id.

找出含有地铁站数量最多的地铁线路，如果多个地铁线路含有的地铁站数量并列第一多，都要列出来并按照下列结果返回，结果按照地铁线路编号升序排列。

	line_id	cnt
1	9	32

Question 7:

Find each line, whose maximum value of num is greater than or equal to 30 in the lines table. Return the station in those lines whose value of num is equal to 1 and equal to the maximum value, and output it in the following format. The output results are arranged in ascending order of line_id and station_id.




在lines表中找出每一条地铁线的num值大于等于30的地铁线路，并返回该线路的num值等于1与等于最大值的地铁站，并按照下列格式输出，输出结果按照line_id 升序，station_id升序排列。

	english_name	line_id	num
1	Luohu	1	1
2	Airport East	1	30
3	Yitian	3	1
4	Shuanglong	3	30
5	Hanghai Road	9	1
6	Wenjin	9	32

Question 8:

Find the previous and next stations of all lines where the No. 11 station is located. Which means, find the num-1 and num+1 stations of the No. 11 station in each line. Output in the following format, and the output results are arranged in ascending order of line_id and station_id.

找出第11号地铁站坐落的所有地铁线路中的上一站与下一站，即找出每一条地铁线路中11号地铁站的num-1与num+1的地铁站。并按照下列格式输出，输出结果按照line_id 升序，station_id升序排列。

	 line_id	 english_name	 num
1	1	Xiangmihu	10
2	1	Zhuzilin	12
3	7	Nonglin	9
4	7	Shangsha	11
5	9	Xiasha	14
6	9	Xiangmei	16
7	11	Hongshuwan South	16
8	11	Futian	18