

Assignment 2: Complex Queries

1. List the latitude information of all stations on metro Line 4. For those stations that have latitude information, please output "The latitude of `<English_name_of_the_station>` station is: `<latitude>`"; for those stations that do not have latitude information, please output "No latitude information for `<English_name_of_the_station>` station".

请考虑所有在4号线中的车站，对于有纬度信息的车站，请输出“The latitude of `<English_name_of_the_station>` station is: `<latitude>`”；对于没有纬度信息的车站，请输出“No latitude information for `<English_name_of_the_station>` station”。

	latitude_info
1	The latitude of Convention and Exhibition Center Station station is: 22.5375
2	The latitude of Civic Center station is: 22.54444
3	The latitude of Children's Palace station is: 22.550278
4	The latitude of Futian Checkpoint station is: 22.5182
5	The latitude of Fumin station is: 22.5258
6	The latitude of Lianhua North station is: 22.56083

2. Please find out the metro lines that overlap with bus stops on bus line2, and the corresponding subway stations. Arrange the result in ascending order according to the metro line id. If there is more than one overlapping station on one metro line, arrange them in ascending order according to the station id. Please output the subway line id and the Chinese name of the corresponding station.

请找出与2路公交车站点有重叠的地铁线以及对应的地铁站，按照地铁线id升序排列，若有地铁站id一致的情况，按照站点id升序排列。请输出地铁线路id以及对应站点的中文名称





	line_id	chinese_name
1	1	罗湖
2	1	国贸
3	2	湖贝
4	3	翠竹
5	3	田贝
6	5	太安

3. [10 pts] Please find the metro line that has maximum station count. Please output the station id and the chinese name of the first station of the line. If there is more than one line that has the maximum station number, please output them all in ascending order.

找出拥有最多站点的地铁线路，输出线路id以及始发站点的中文名称。如果有多条线路，按线路id升序排列。

4. Please list the "event" ("line `line_id` extended/opened" for the opening and extension of the metro line) that occurred between 2008 and 2021. Please output the year and event in ascending order of the year.

列出所有在2008-2021年之间的“事件”（地铁线路的开通与扩展）并按照年限升序排列。

	 year 	 event 
1	2010	line 2 opened
2	2010	line 3 opened
3	2011	line 2 extend
4	2011	line 3 extend
5	2011	line 4 extend

5. Find the stations that on metro line 1 and 5, but not on metro line 2. Please output the station id and the corresponding chinese name of the station in ascending order of the station id.

请找出一号线和五号线都经过，但二号线不经过的站点。输出站点id以及对应中文名称，按id升序排列。