1.

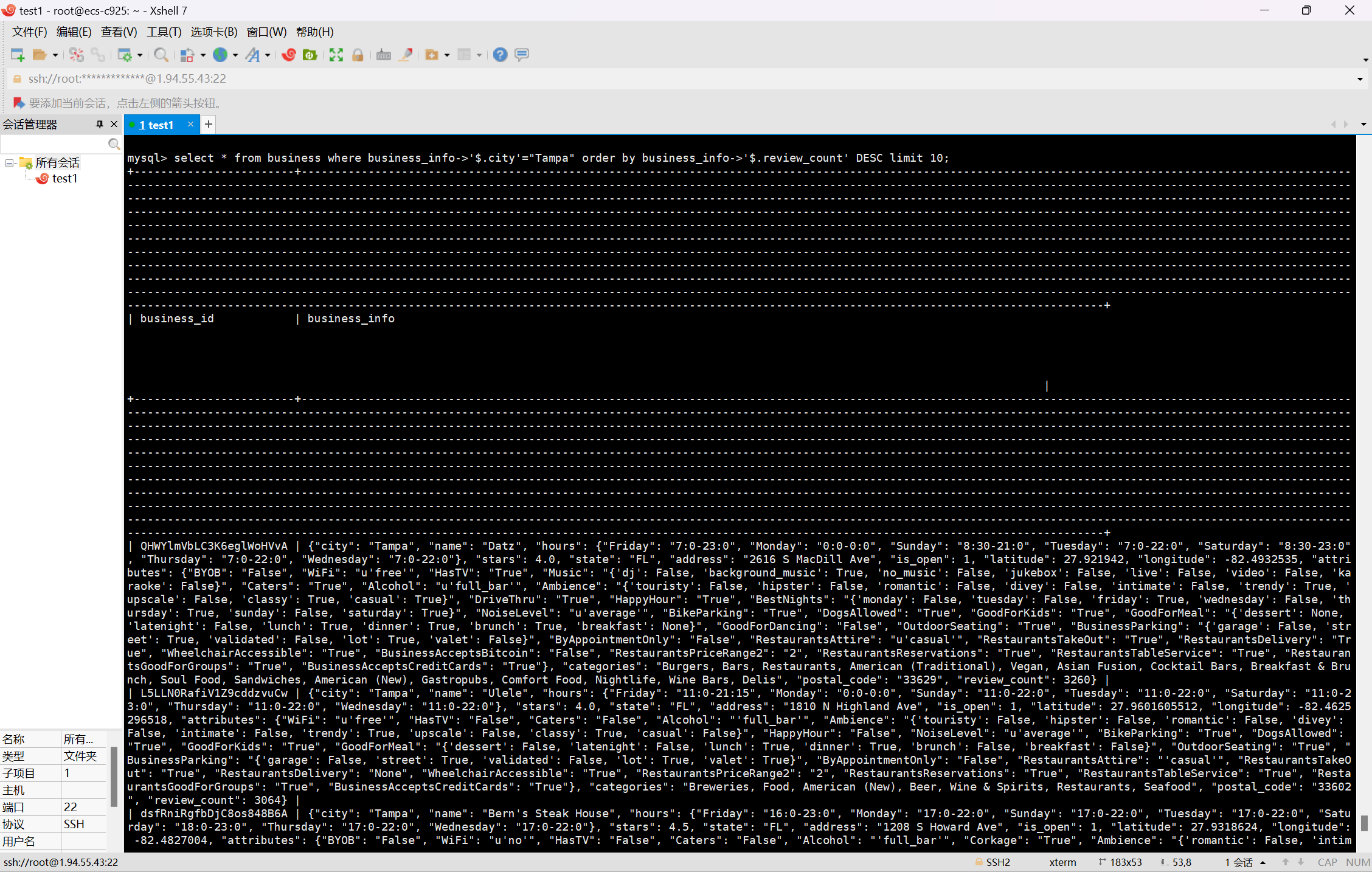
select \*

from business

where business\_info->'$.city'="Tampa"

order by business\_info->'$.review\_count' desc

limit 10;



2.

select

json\_keys(business\_info) as keys\_info,

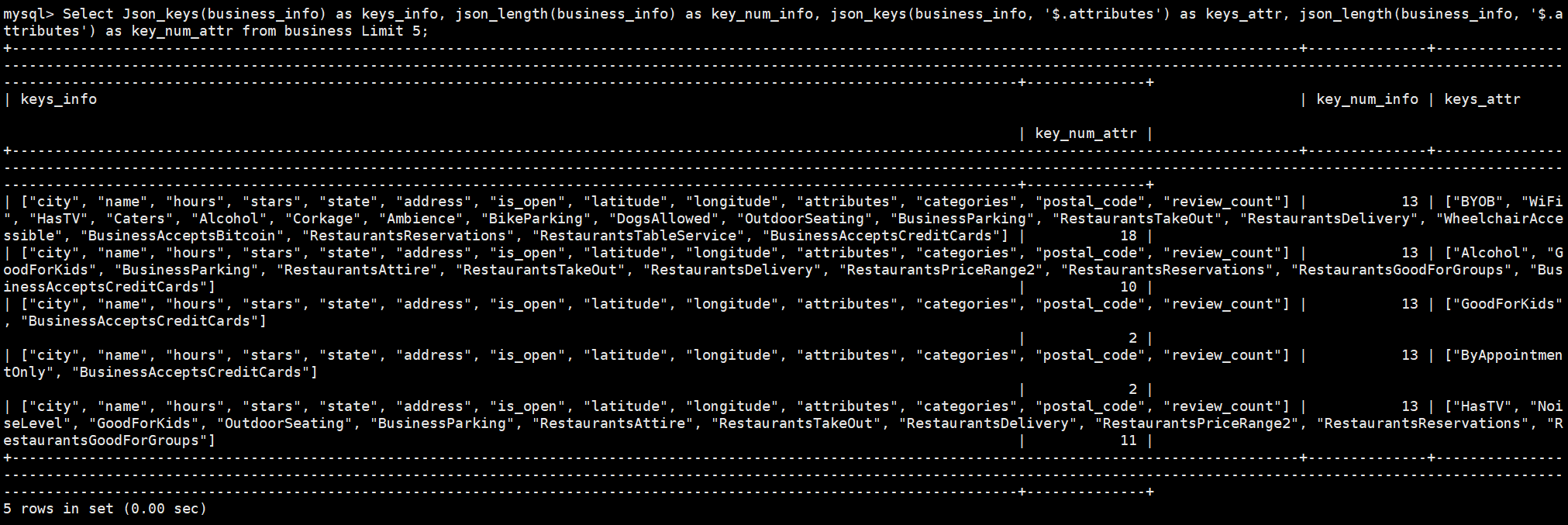
json\_length(business\_info) as key\_num\_info,

json\_keys(business\_info, '$.attributes') as keys\_attr,

json\_length(business\_info, '$.attributes') as key\_num\_attr

from business

limit 5;



3.

select

business\_info->'$.name' as name,

json\_type(business\_info->'$.name') as name\_type,

business\_info->'$.stars' as stars,

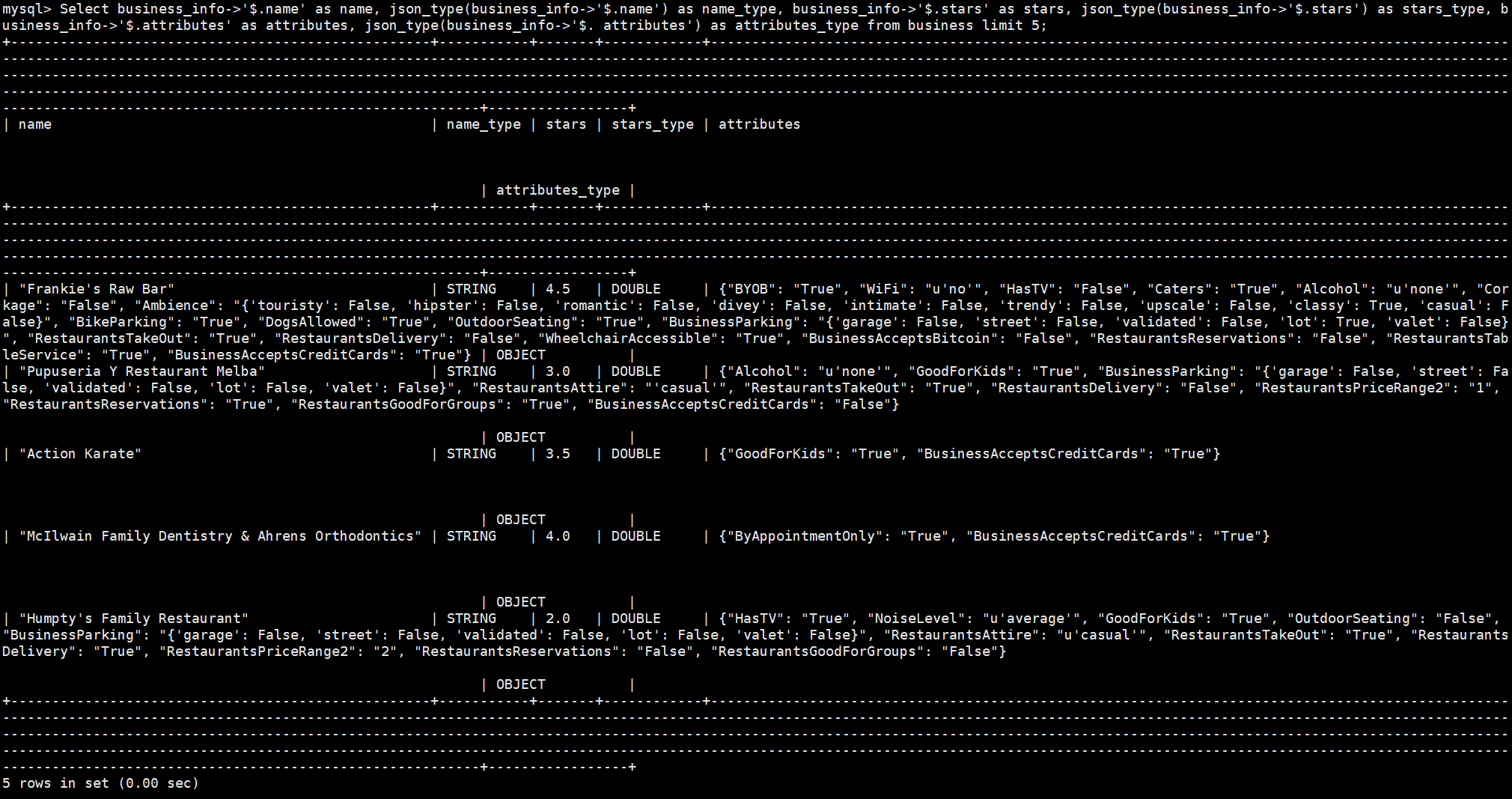
json\_type(business\_info->'$.stars') as stars\_type,

business\_info->'$.attributes' as attributes,

json\_type(business\_info->'$. attributes') as attributes\_type

from business

limit 5;



4.

select

json\_unquote(business\_info->'$.name') as name,

business\_info->'$.attributes' as attributes,

business\_info->'$.hours' as open\_time

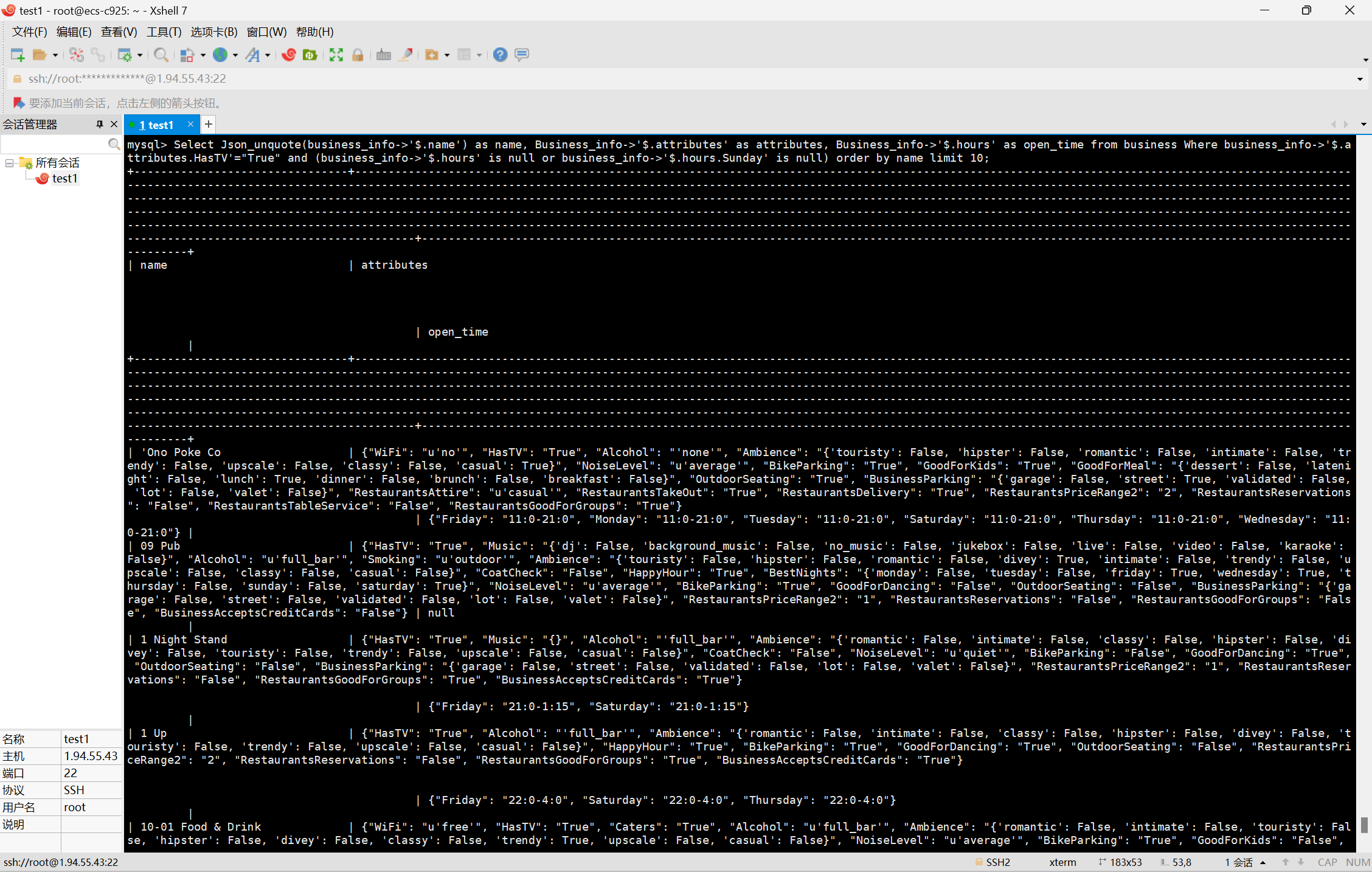
from business

where business\_info->'$.attributes.HasTV'="True"

and (business\_info->'$.hours' is null or business\_info->'$.hours.Sunday' is null)

order by name

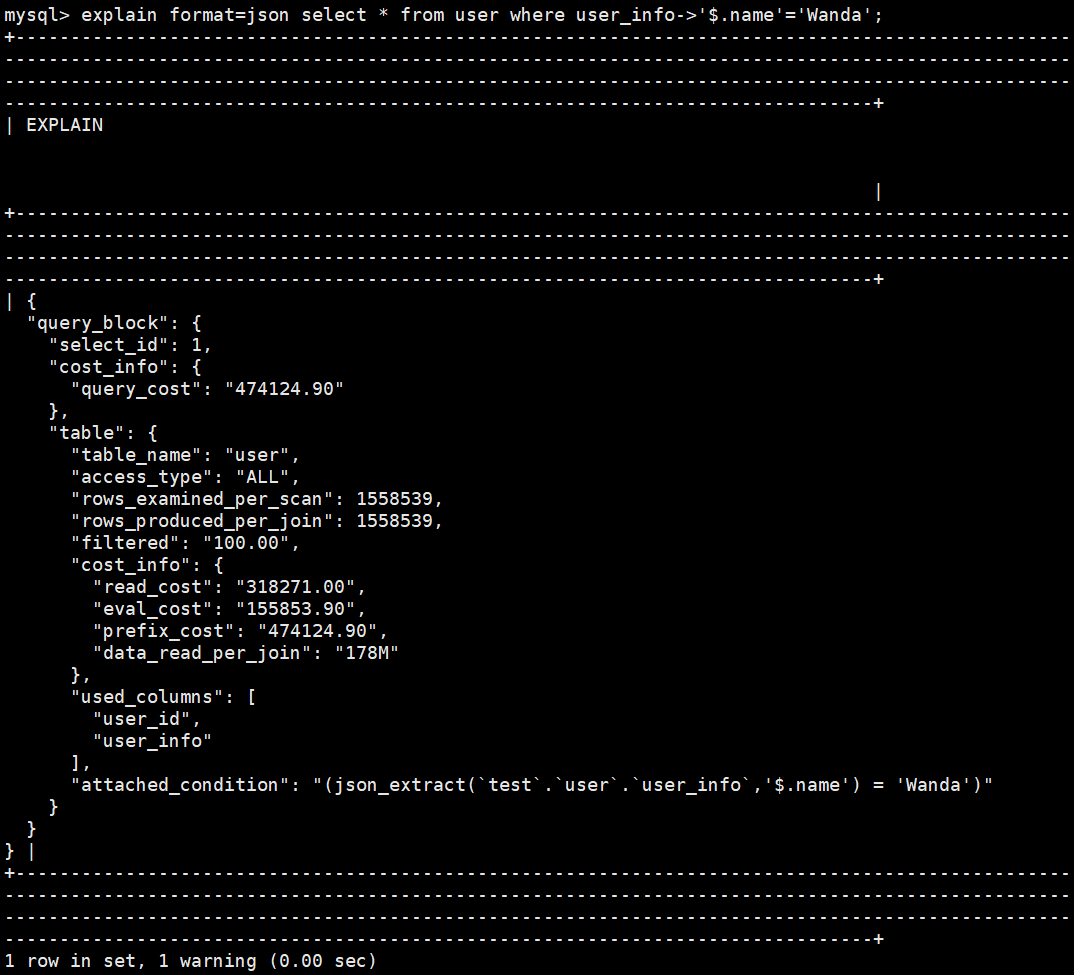
limit 10;

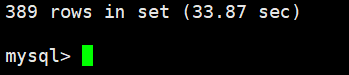


5.

explain format=json

select \* from user where user\_info->'$.name'='Wanda';





使用MongoDB查询同样的语句，并使用explain查看查询计划：

db.user.find({'name':"Wanda"}).explain("executionStats")

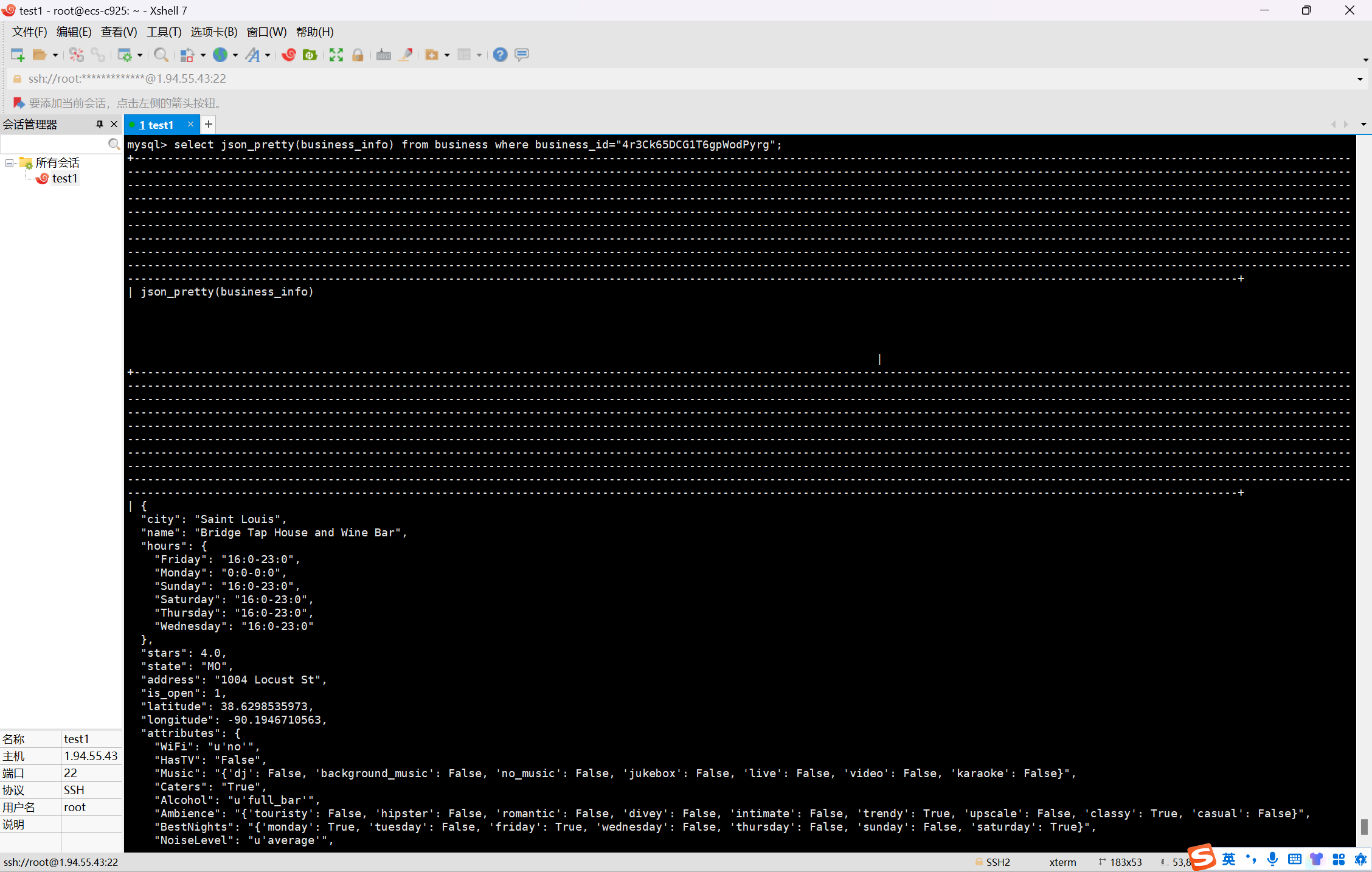


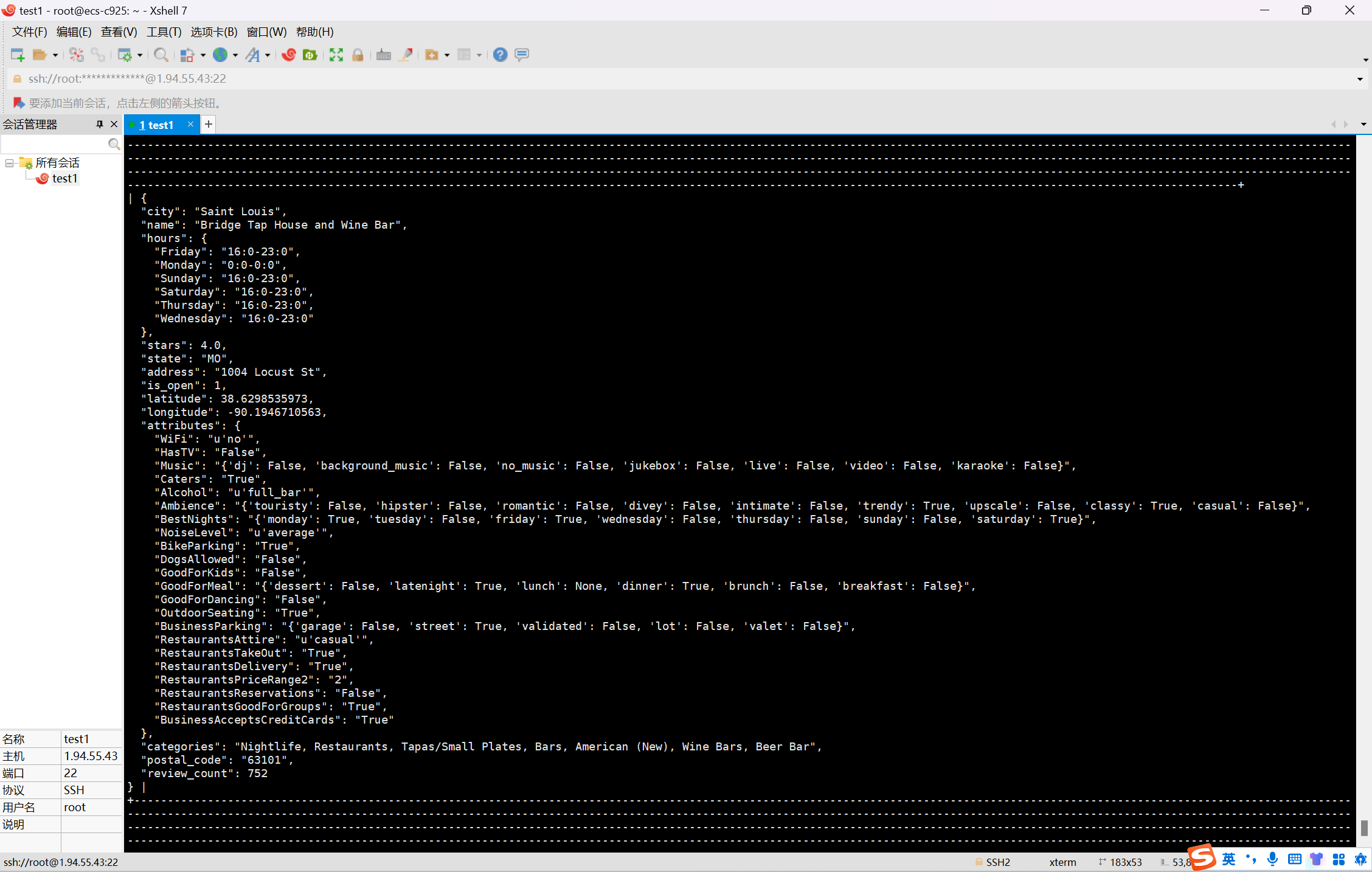
6.

select json\_pretty(business\_info)

from business

where business\_id="4r3Ck65DCG1T6gpWodPyrg";



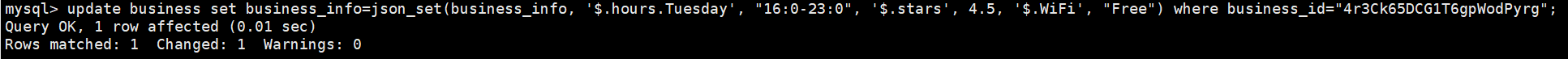


更新操作：

update business

set business\_info=json\_set(business\_info, '$.hours.Tuesday', "16:0-23:0", '$.stars', 4.5, '$.WiFi', "Free")

where business\_id="4r3Ck65DCG1T6gpWodPyrg";

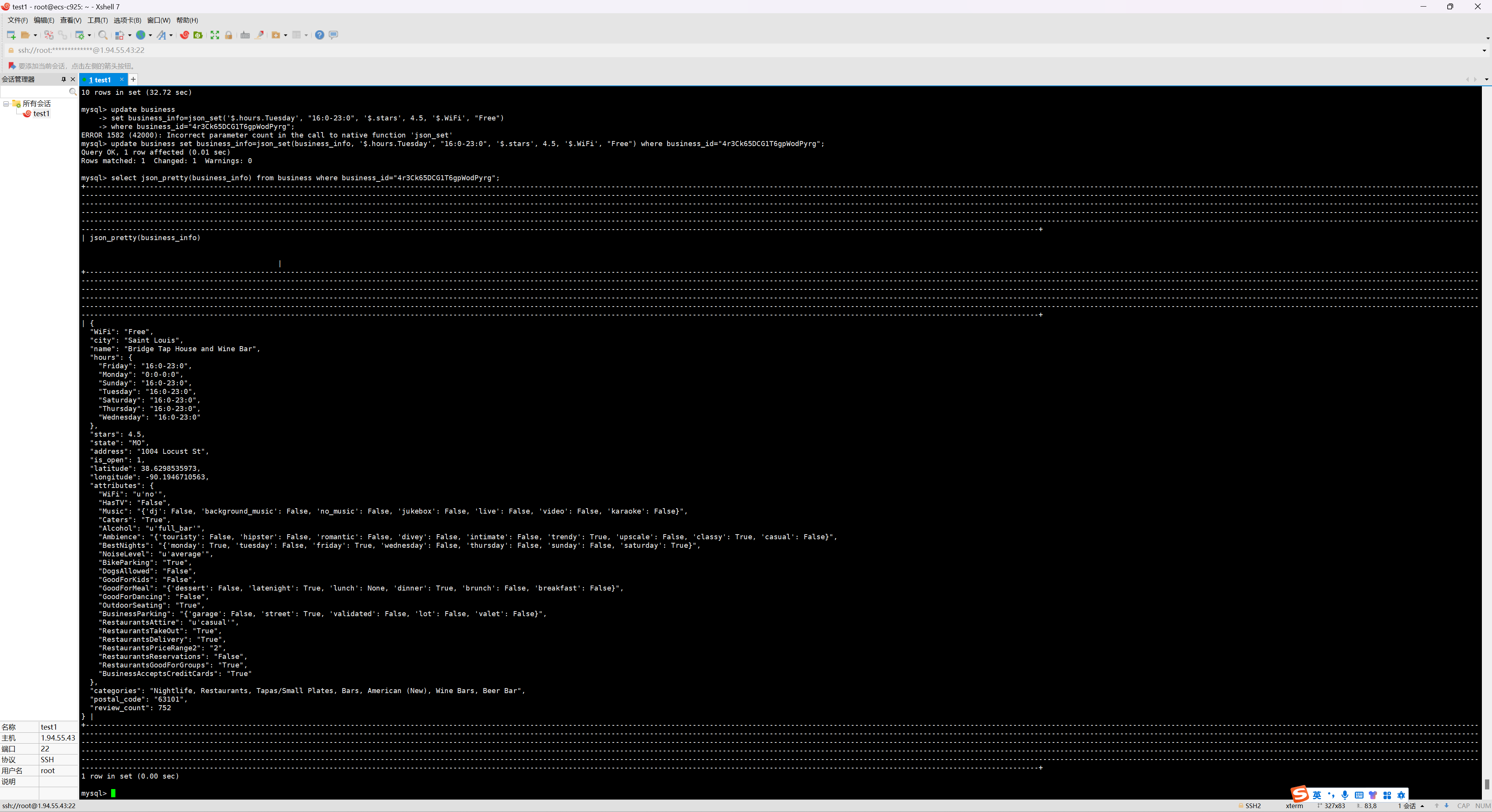


再次查询：

select json\_pretty(business\_info)

from business

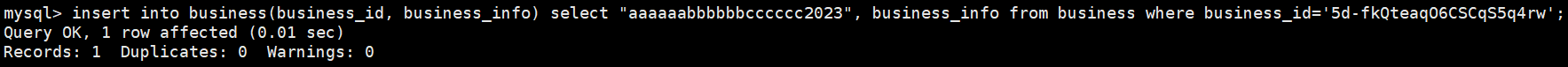
where business\_id="4r3Ck65DCG1T6gpWodPyrg";



7.

insert into business(business\_id, business\_info)

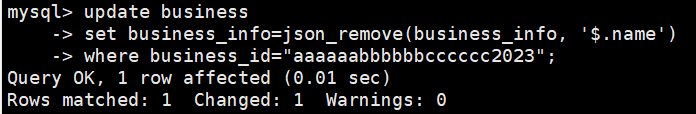
select "aaaaaabbbbbbcccccc2023", business\_info from business where business\_id='5d-fkQteaqO6CSCqS5q4rw';



update business

set business\_info=json\_remove(business\_info, '$.name')

where business\_id="aaaaaabbbbbbcccccc2023";

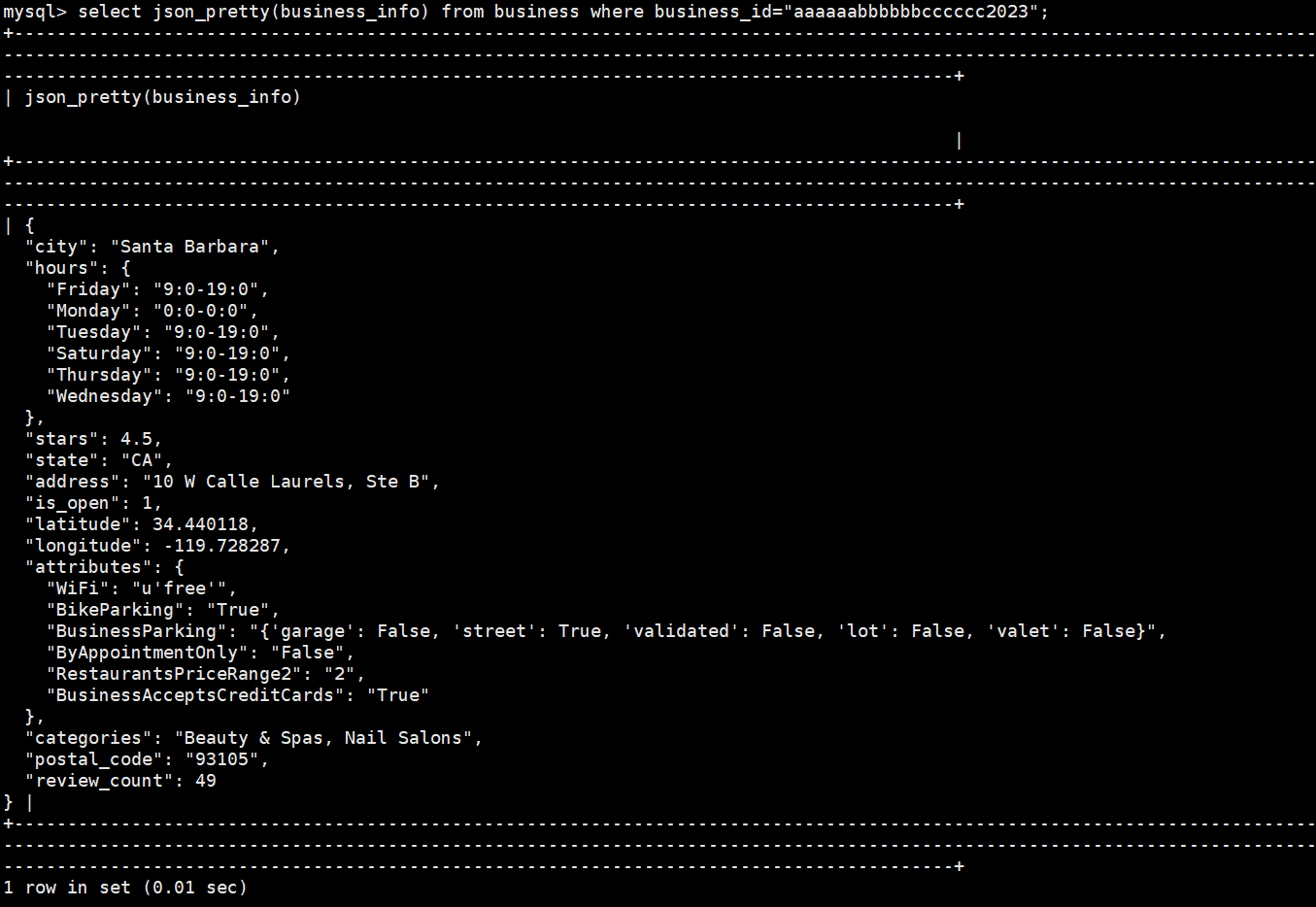


查询：

select json\_pretty(business\_info)

from business

where business\_id="aaaaaabbbbbbcccccc2023";



8.

select

state,

json\_objectagg(city, count) as city\_occ\_num

from

(

select

business\_info->'$.state' as state,

json\_unquote(business\_info->'$.city') as city,

count(\*) as count

from business

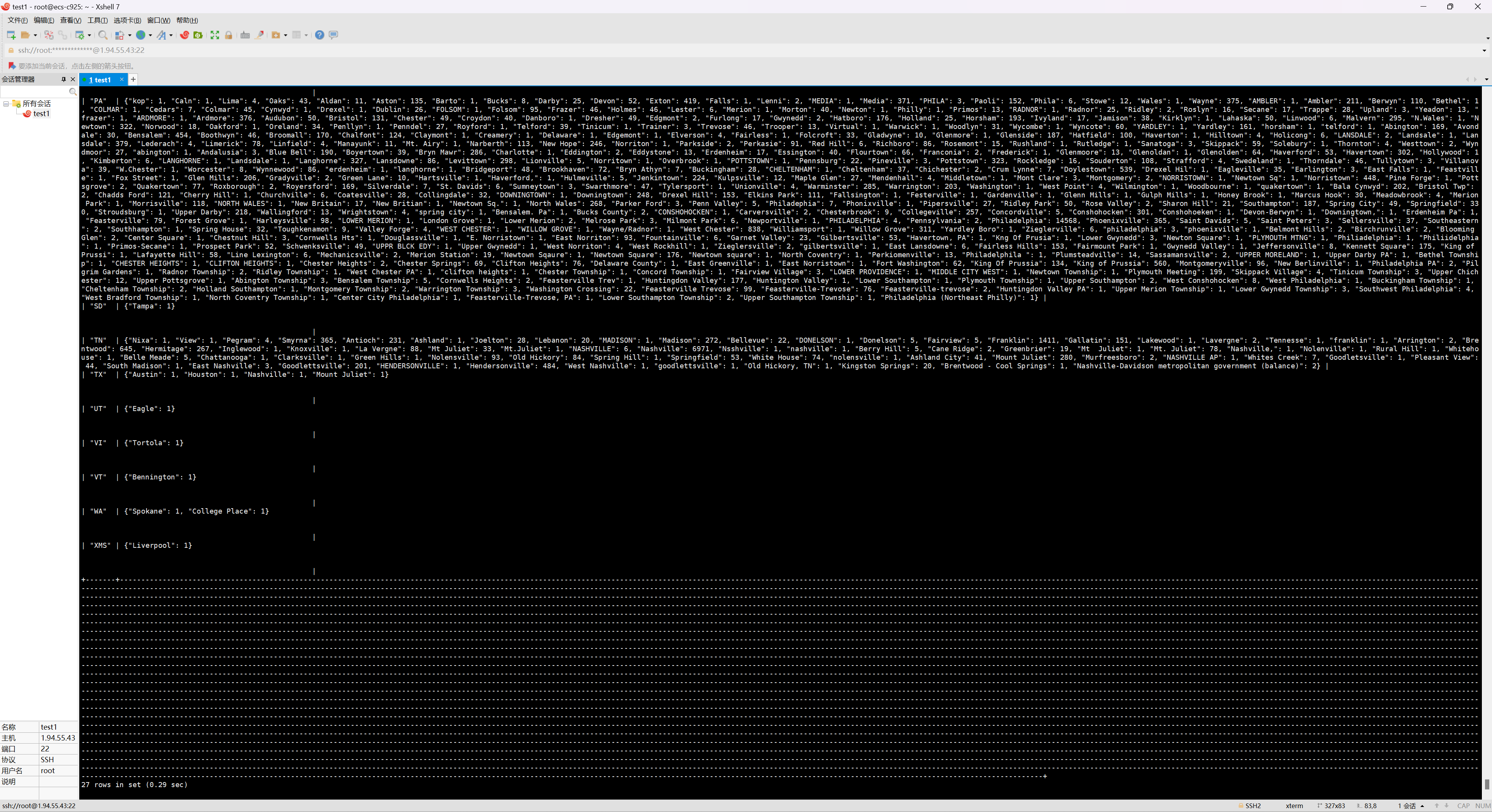
group by state, city

) as sub

group by state

order by state;





9.

select sub.userid as user\_id,

uu.user\_info->'$.name' as name,

sub.textarray as text\_array from

(

select t.user\_id as userid,

json\_arrayagg(t.tip\_info->'$.text') as textarray

from tip t

join user u on REGEXP\_LIKE(u.user\_info->'$.friends', t.user\_id)

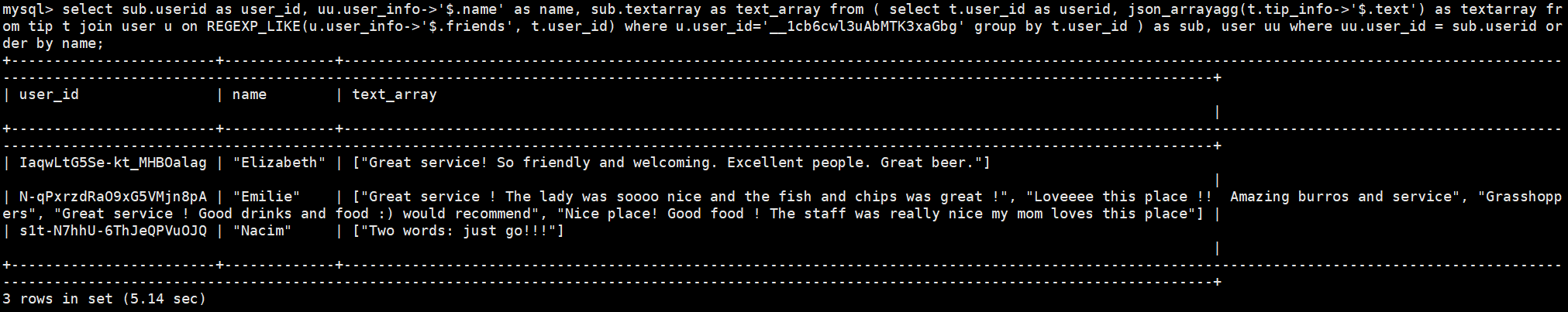
where u.user\_id='\_\_1cb6cwl3uAbMTK3xaGbg'

group by t.user\_id

) as sub, user uu

where uu.user\_id = sub.userid

order by name;



10.

select

a.business\_info->'$.name' as name1,

a.business\_info->'$.city' as city1,

b.business\_info->'$.name' as name2,

b.business\_info->'$.city' as city2,

a.business\_info->'$.hours' as hours1,

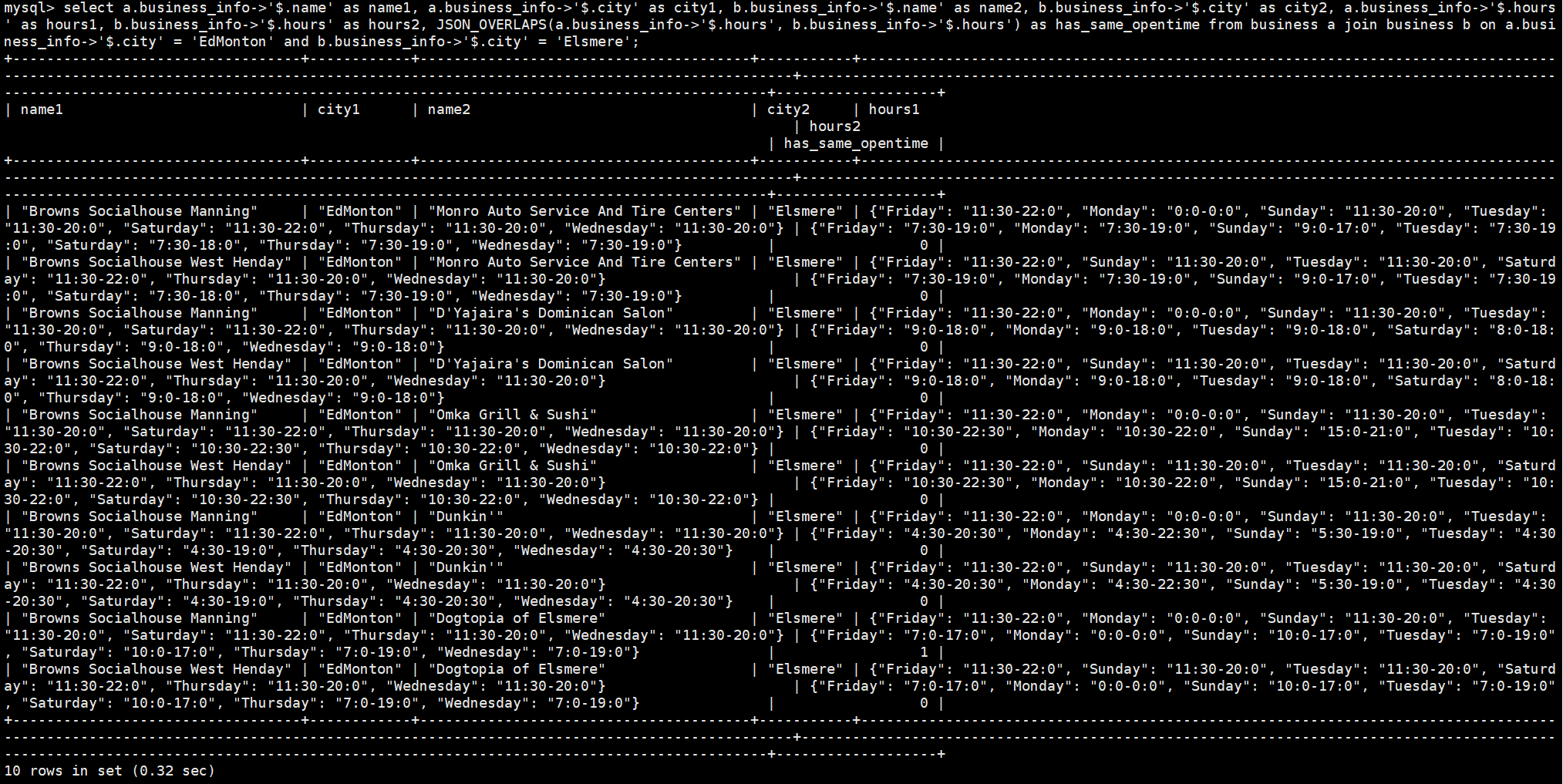
b.business\_info->'$.hours' as hours2,

JSON\_OVERLAPS(a.business\_info->'$.hours', b.business\_info->'$.hours') as has\_same\_opentime

from business a

join business b

on a.business\_info->'$.city' = 'EdMonton' and b.business\_info->'$.city' = 'Elsmere';



11.

select

user\_info->'$.name' as name,

user\_info->'$.average\_stars' as avg\_stars,

JSON\_ARRAY(user\_info->'$.funny', user\_info->'$.useful', user\_info->'$.cool', user\_info->'$.funny'+user\_info->'$.useful'+user\_info->'$.cool') as '[funny,useful,cool,sum]'

from user

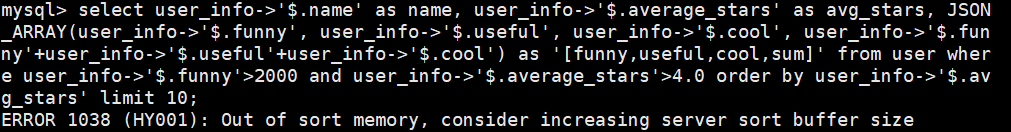
where user\_info->'$.funny'>2000

and user\_info->'$.average\_stars'>4.0

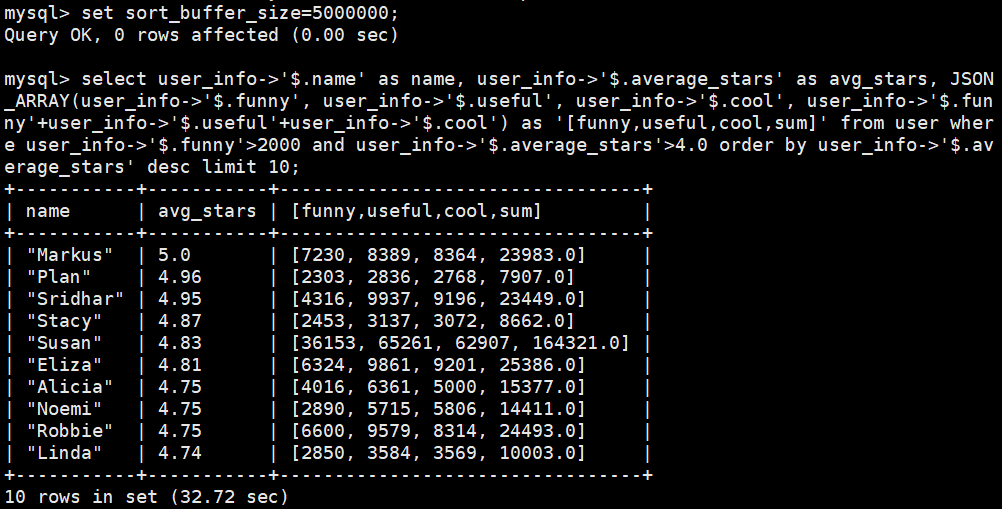
order by user\_info->'$.average\_stars' desc

limit 10;

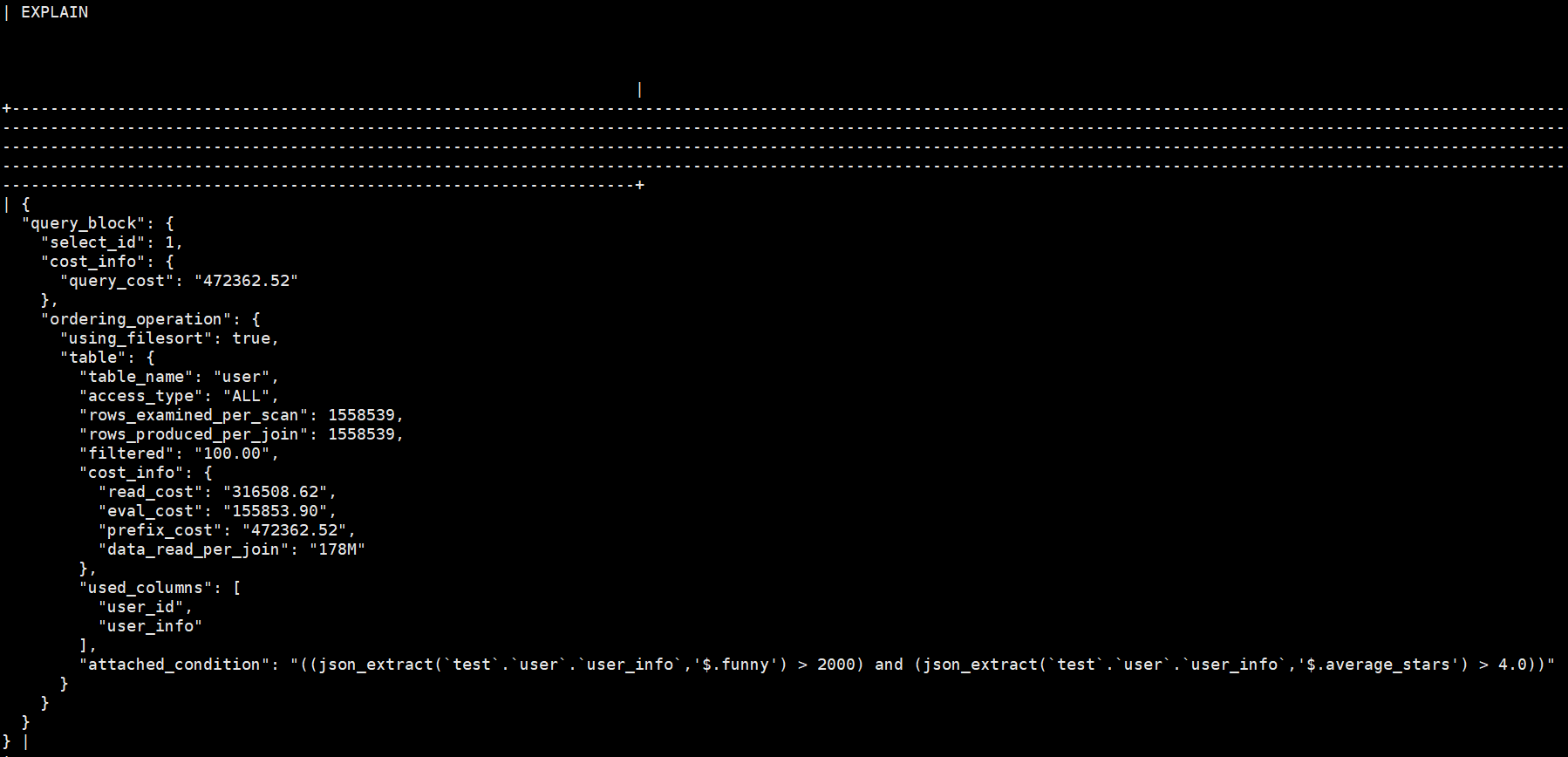
报错：



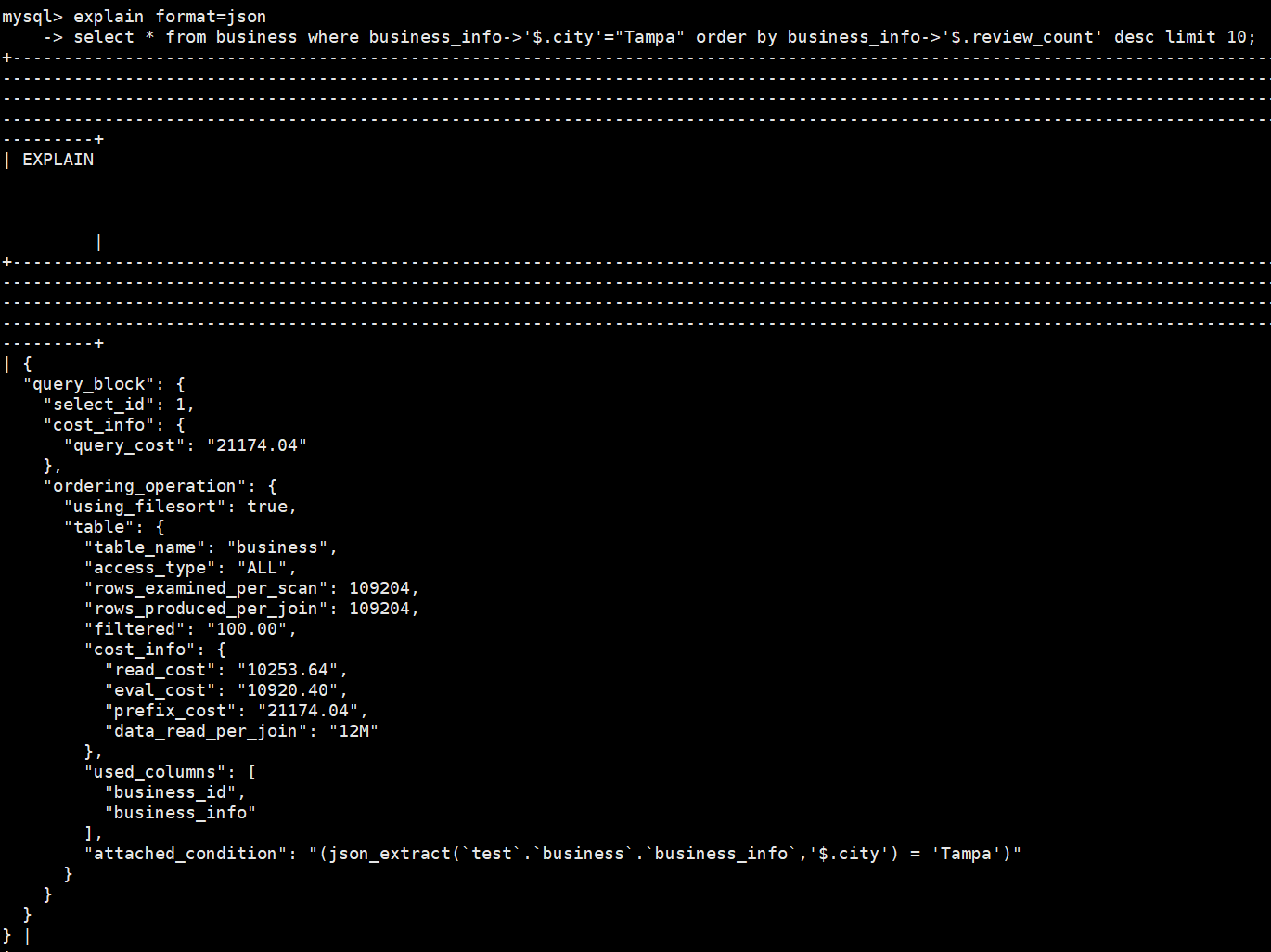
手动修改缓存池大小即可



在前面加上explain format=json



和第一题对比：



12.

select

json\_merge\_preserve(b.business\_info, u.user\_info)

from

(

select business\_id,

count(\*) as count

from tip

group by business\_id

order by count desc

limit 1

) as tb

join

(

select user\_id,

count(\*) as count

from tip

group by user\_id

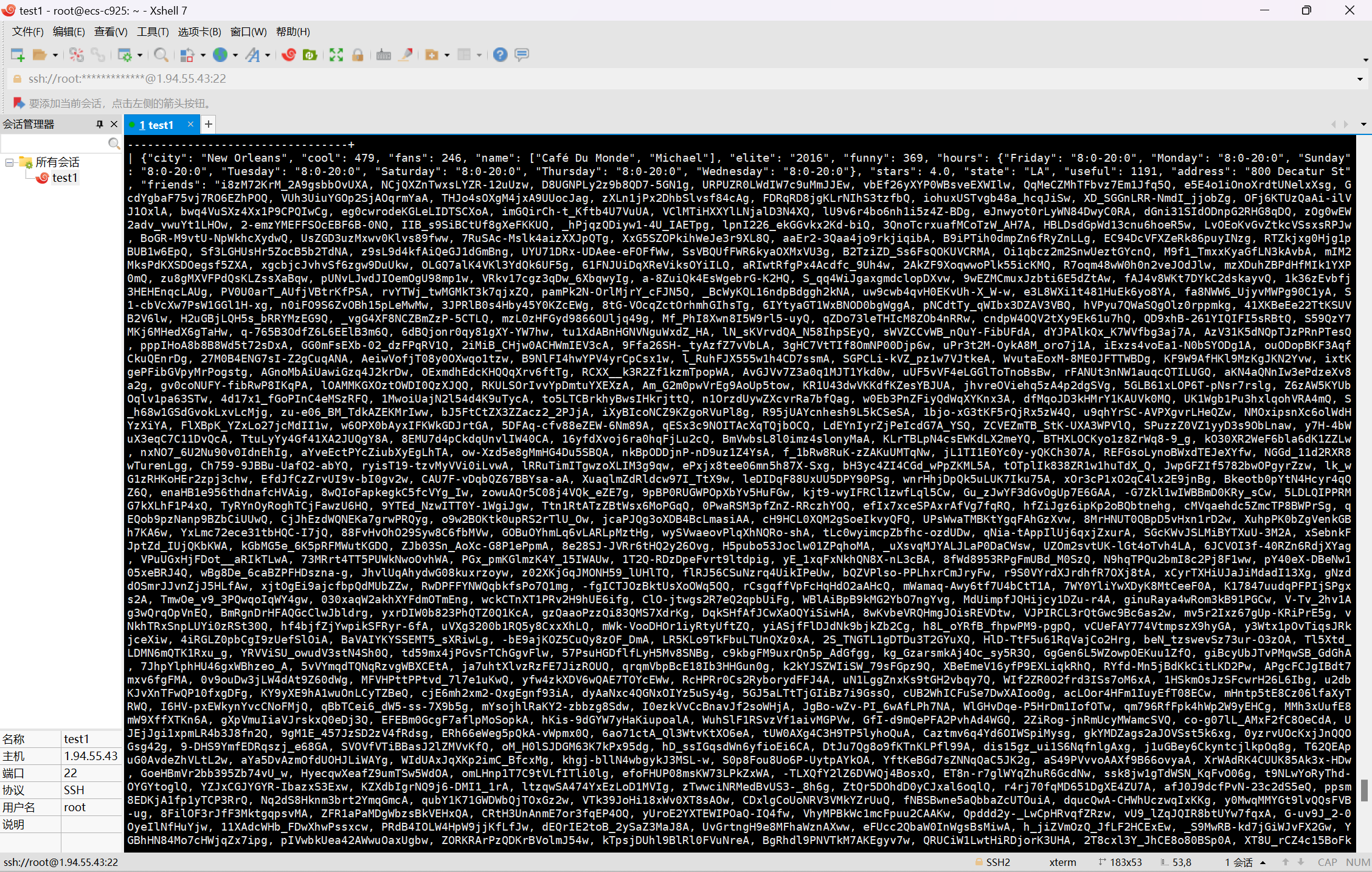
order by count desc

limit 1

) as tu

join business b on tb.business\_id=b.business\_id

join user u on tu.user\_id=u.user\_id;



13.

select

sub.business\_name,

sub.review\_count as business\_review\_count,

case when sub.hours->'$.Tuesday' is null then 0 else 1 end as business\_open\_on\_Tuesday,

jt.time\_slot

from

(select

business\_info->'$.name' as business\_name,

business\_info->'$.review\_count' as review\_count,

business\_info->'$.hours' as hours

from business

order by business\_info->'$.review\_count' desc

limit 3) as sub

join json\_table(

sub.hours,

"$.\*" columns (

time\_slot VARCHAR(255) PATH '$')

) as jt on 1=1

order by sub.business\_name;

