第二次作业：关于 SQL 语言

杜政晓

1、假设有关系表 persons(name, age)，请用一条完整的 SQL 语句来表达以下查询：

关系表 persons 中不重复元组的个数。

至少用两种不同的方法来实现上述查询。

（1）select count(distinct name, age) from persons;

（2）select count(*) from (select distinct * from persons) as no_repetition;

2、在 SELECT-FROM-WHERE 表达式中，FROM 子句里可以嵌套另外一个查询（即子查询），请用你的机器上的数据库系统做实验，看看这样的嵌套可以多少层？

在 OS X 10.13.6，MySQL 8.0.12 中，最多可以嵌套 64 层（也就是一共出现 64 个 select）

```
mysql> select * from (select * from (select * from (select * from (select * from
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 from (select * from persons) as n1) as n2) as n3) as n4) as n5) as n6) as n7) a
s n8) as n9) as n10) as n11) as n12) as n13) as n14) as n15) as n16) as n17) as
n18) as n19) as n20) as n21) as n22) as n23) as n24) as n25) as n26) as n27) as
n28) as n29) as n30) as n31) as n32) as n33) as n34) as n35) as n36) as n37) as
n38) as n39) as n40) as n41) as n42) as n43) as n44) as n45) as n46) as n47) as
n48) as n49) as n50) as n51) as n52) as n53) as n54) as n55) as n56) as n57) as
n58) as n59) as n60) as n61) as n62) as n63) as n64;
ERROR 1473 (HY000): Too high level of nesting for select
```

3、在你的数据库系统中，给定一个如下查询：

SELECT R

FROM   T

WHERE R IN (SELECT-FROM-WHERE)

假设 SELECT-FROM-WHERE 这个子查询只有一个单值，就是空值 NULL。

请问：1、数据库选项 ANSI_NULLS 的打开与关闭是否影响查询结果？

影响，如果 T 中有 NULL，ANSI_NULLS 打开的话会返回空集合，ANSI_NULLS

关闭的话会返回 NULL。

2、如果把保留字 IN 改成=，其他条件不变。那么数据库选项 ANSI_NULLS 的打

开与关闭是否影响查询结果？

影响，如果 T 中有 NULL，ANSI_NULLS 打开的话会返回空集合，ANSI_NULLS

关闭的话会返回 NULL。