

避免在PL_SQL中使用嵌套游标查询Oracle认证考试 PDF转换可能丢失图片或格式，建议阅读原文

https://www.100test.com/kao_ti2020/587/2021_2022__E9_81_BF_E5_85_8D_E5_9C_A8P_c102_587146.htm 考虑下面的 PL/SQL 代码，这段代码生成一个 XML 格式的矩阵样式的报表：

```
declare l_count integer. begin dbms_output.put_line(). -- generate matrix of parts by country for part in (0select id,description from parts order by description) loop dbms_output.put_line(). dbms_output.put_line(||part.description||). for country in (0select code from countries order by name) loop 0select sum(cnt) into l_count from orders where part_id = part.id and cc = country.code. dbms_output.put_line(||nvl(l_count,0)||). end loop. dbms_output.put_line(). end loop. dbms_output.put_line(). end.
```

如果在这个例子中 parts 和 countries 有很多行数据，那么性能就会趋于下降。这是因为，在 PL/SQL 中，每次遇到一个游标 FOR 循环，在重新查询并获得数据时，都会有一个切换到 SQL 的上下文切换。以一些服务器端内存为代价，提高这种构造的速度是有可能做到的如果动态构建 PL/SQL 数据表和矩阵单元格条目就可以提高速度。例如：

```
declare type part_tbl_type is table of parts%rowtype index by binary_integer. part_tbl part_tbl_type. -- type country_tbl_type is table of countries%rowtype index by binary_integer. country_tbl country_tbl_type. -- type cell_rec is record ( part_id orders.part_id%type, cc orders.cc%type, cnt orders.cnt%type ). type cell_tbl_type is table of cell_rec index by binary_integer. cell_tbl cell_tbl_type. -- i pls_integer. begin -- build rows for row in (0select
```

```
* from parts order by description) loop part_tbl(part_tbl.count 1) :=  
row. end loop. -- build columns for col in (0select * from countries  
order by name) loop country_tbl(country_tbl.count 1) := col. end  
loop. -- build cells for cell in (0select part_id,cc,sum(cnt) from  
orders group by part_id,cc) loop cell_tbl(cell_tbl.count 1) := cell.  
end loop. dbms_output.put_line(). -- generate matrix of parts by  
country i := cell_tbl.first. for row in part_tbl.first .. part_tbl.last loop  
dbms_output.put_line().  
dbms_output.put_line(||part_tbl(row).description||). for col in  
country_tbl.first .. country_tbl.last loop if cell_tbl(i).part_id =  
part_tbl(row).id and cell_tbl(i).cc = country_tbl(col).code 100Test  
下载频道开通 , 各类考试题目直接下载。 详细请访问  
www.100test.com
```