

基于自定义函数的Function-Based索引创建 PDF转换可能丢失图片或格式，建议阅读原文

[https://www.100test.com/kao\\_ti2020/294/2021\\_2022\\_\\_E5\\_9F\\_BA\\_E4\\_BA\\_8E\\_E8\\_87\\_AA\\_E5\\_c67\\_294138.htm](https://www.100test.com/kao_ti2020/294/2021_2022__E5_9F_BA_E4_BA_8E_E8_87_AA_E5_c67_294138.htm) 在oralce中给自建函数创建索引，结果不成功。source:Create Index

```
IDX_T_SP_TWOTYPESTAT_0_f On
```

```
T_SP_TWOTYPESTAT_0(f_dateadd(yearmonth,12,2)). err:the function is not deterministic. 我们看一下这是为什么?随便一个测试可以再现这个问题,我们创建一个函数(本范例函数用于进行16进制向10进制转换):CREATE OR REPLACE FUNCTION
```

```
h2ten ( p_str IN VARCHAR2, p_from_base IN NUMBER DEFAULT 16) RETURN NUMBER IS l_num NUMBER
```

```
DEFAULT 0. l_hex VARCHAR2 (16) DEFAULT
```

```
0123456789ABCDEF.BEGIN FOR i IN 1 .. LENGTH (p_str)
```

```
LOOP l_num := l_num * p_from_base INSTR (l_hex, UPPER (SUBSTR (p_str, i, 1))) - 1. END LOOP. RETURN l_num.END
```

```
h2ten. 此时创建索引,获得如下错误信息:SQL> create table t as 0select username,a hex from dba_users.Table createdSQL> create index i_t on t (h2ten(hex)).create index i_t on t
```

```
(h2ten(hex))ORA-30553: The function is not deterministic 如果需要创建基于自定义函数的索引,那么我们需要指定deterministic
```

```
参数:CREATE OR REPLACE FUNCTION h2ten ( p_str IN VARCHAR2, p_from_base IN NUMBER DEFAULT 16)
```

```
RETURN NUMBER DETERMINISTICIS l_num NUMBER DEFAULT 0. l_hex VARCHAR2 (16) DEFAULT
```

```
0123456789ABCDEF.BEGIN FOR i IN 1 .. LENGTH (p_str)
```

```
LOOP l_num := l_num * p_from_base INSTR (l_hex, UPPER
(SUBSTR (p_str, i, 1))) - 1. END LOOP. RETURN l_num.END
h2ten.此时创建索引即可: SQL> create index i_t on t
(h2ten(hex)).Index created Oracle这样解释这个参数:The hint
DETERMINISTIC helps the optimizer avoid redundant function
calls. If a stored function was called previously with the same
arguments, the optimizer can elect to use the previous result. The
function result should not depend on the state of session variables or
schema objects. Otherwise, results might vary across calls. Only
DETERMINISTIC functions can be called from a function-based
index or a materialized view that has query-rewrite enabled. 100Test
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www.100test.com
```