

110个oracle常用函数总结(7)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\\_ti2020/645/2021\\_2022\\_110\\_E4\\_B8\\_AAorac\\_c102\\_645067.htm](https://www.100test.com/kao_ti2020/645/2021_2022_110_E4_B8_AAorac_c102_645067.htm) "tb42" class="mar10"> 91。REGR\_

(Linear Regression) Functions功能描述：这些线性回归函数适合最小二乘法回归线，有9个不同的回归函数可使用。

REGR\_SLOPE：返回斜率，等于 $\text{COVAR\_POP}(\text{expr1}, \text{expr2}) / \text{VAR\_POP}(\text{expr2})$  REGR\_INTERCEPT：返回回归线的y截距，

等于 $\text{AVG}(\text{expr1}) - \text{REGR\_SLOPE}(\text{expr1}, \text{expr2}) * \text{AVG}(\text{expr2})$

REGR\_COUNT：返回用于填充回归线的非空数字对的数目

REGR\_R2：返回回归线的决定系数，计算式为：If

$\text{VAR\_POP}(\text{expr2}) = 0$  then return NULL If  $\text{VAR\_POP}(\text{expr1}) = 0$  and  $\text{VAR\_POP}(\text{expr2}) \neq 0$  then return 1 If  $\text{VAR\_POP}(\text{expr1}) >$

$0$  and  $\text{VAR\_POP}(\text{expr2}) \neq 0$  then return

$\text{POWER}(\text{CORR}(\text{expr1}, \text{expr2}), 2)$  REGR\_AVGX：计算回归线的自变量( $\text{expr2}$ )的平均值，去掉了空对( $\text{expr1}, \text{expr2}$ )后，等

于 $\text{AVG}(\text{expr2})$  REGR\_AVGY：计算回归线的应变变量( $\text{expr1}$ )的平均值，去掉了空对( $\text{expr1}, \text{expr2}$ )后，等于 $\text{AVG}(\text{expr1})$

REGR\_SXX：返回值等于 $\text{REGR\_COUNT}(\text{expr1}, \text{expr2}) *$

$\text{VAR\_POP}(\text{expr2})$  REGR\_SYY：返回值等

于 $\text{REGR\_COUNT}(\text{expr1}, \text{expr2}) * \text{VAR\_POP}(\text{expr1})$  REGR\_SXY:

返回值等于 $\text{REGR\_COUNT}(\text{expr1}, \text{expr2}) *$

$\text{COVAR\_POP}(\text{expr1}, \text{expr2})$ （下面的例子都是在SH用户下完

成的）SAMPLE 1：下例计算1998年最后三个星期中两种产品

（260和270）在周末的销售量中已开发票数量和总数量的累

积斜率和回归线的截距 SELECT t.fiscal\_month\_number

```
"Month", t.day_number_in_month "Day",
REGR_SLOPE(s.amount_sold, s.quantity_sold) OVER (ORDER
BY t.fiscal_month_desc, t.day_number_in_month) AS
CUM_SLOPE, REGR_INTERCEPT(s.amount_sold,
s.quantity_sold) OVER (ORDER BY t.fiscal_month_desc,
t.day_number_in_month) AS CUM_ICPT FROM sales s, times t
WHERE s.time_id = t.time_id AND s.prod_id IN (270, 260) AND
t.fiscal_year=1998 AND t.fiscal_week_number IN (50, 51, 52) AND
t.day_number_in_week IN (6,7) ORDER BY t.fiscal_month_desc,
t.day_number_in_month. Month Day CUM_SLOPE CUM_ICPT
```

```
----- 12 12 -68 1872 12 12 -68
1872 12 13 -20.244898 1254.36735 12 13 -20.244898 1254.36735 12
19 -18.826087 1287 12 20 62.4561404 125.28655 12 20 62.4561404
125.28655 12 20 62.4561404 125.28655 12 20 62.4561404 125.28655
12 26 67.2658228 58.9712313 12 26 67.2658228 58.9712313 12 27
37.5245541 284.958221 12 27 37.5245541 284.958221 12 27
37.5245541 284.958221
```

SAMPLE 2 : 下例计算1998年4月每天的  
累积交易数量

```
SELECT UNIQUE t.day_number_in_month,
REGR_COUNT(s.amount_sold, s.quantity_sold) OVER
(PARTITION BY t.fiscal_month_number ORDER BY
t.day_number_in_month) "Regr_Count" FROM sales s, times t
WHERE s.time_id = t.time_id AND t.fiscal_year = 1998 AND
t.fiscal_month_number = 4. DAY_NUMBER_IN_MONTH
Regr_Count ----- 1 825 2 1650 3 2475 4 3300
```

. 26 21450 30 22200 SAMPLE 3 : 下例计算1998年每月销售量中  
已开发票数量和总数量的累积回归线决定系数

```
SELECT
```

```
t.fiscal_month_number, REGR_R2(SUM(s.amount_sold),
SUM(s.quantity_sold)) OVER (ORDER BY
t.fiscal_month_number) "Regr_R2" FROM sales s, times t WHERE
s.time_id = t.time_id AND t.fiscal_year = 1998 GROUP BY
t.fiscal_month_number ORDER BY t.fiscal_month_number.
```

```
FISCAL_MONTH_NUMBER Regr_R2 -----
----- 1 2 1 3 .927372984 4 .807019972 5 .932745567 6 .94682861
7 .965342011 8 .955768075 9 .959542618 10 .938618575 11
.880931415 12 .882769189
```

SAMPLE 4 : 下例计算1998年12月最后两周产品260的销售量中已开发票数量和总数量的累积平均值

```
SELECT t.day_number_in_month, REGR_AVGY(s.amount_sold,
s.quantity_sold) OVER (ORDER BY t.fiscal_month_desc,
t.day_number_in_month) "Regr_AvgY",
REGR_AVGX(s.amount_sold, s.quantity_sold) OVER (ORDER
BY t.fiscal_month_desc, t.day_number_in_month) "Regr_AvgX"
FROM sales s, times t WHERE s.time_id = t.time_id AND
s.prod_id = 260 AND t.fiscal_month_desc = 1998-12 AND
t.fiscal_week_number IN (51, 52) ORDER BY
```

```
t.day_number_in_month. DAY_NUMBER_IN_MONTH
Regr_AvgY Regr_AvgX ----- 14
882 24.5 14 882 24.5 15 801 22.25 15 801 22.25 16 777.6 21.6 18
642.857143 17.8571429 18 642.857143 17.8571429 20 589.5 16.375
21 544 15.1111111 22 592.363636 16.4545455 22 592.363636
16.4545455 24 553.846154 15.3846154 24 553.846154 15.3846154 26
522 14.5 27 578.4 16.0666667
```

SAMPLE 5 : 下例计算产品260和270在1998年2月周末销售量中已开发票数量和总数量的累

积REGR\_SXY, REGR\_SXX, and REGR\_SYY统计值 100Test 下载  
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