

总结归纳：110个Oracle常用函数的总结(11) PDF转换可能丢失图片或格式，建议阅读原文

https://www.100test.com/kao_ti2020/239/2021_2022__E6_80_BB_E7_BB_93_E5_BD_92_E7_c102_239002.htm 101

。RATIO_TO_REPORT 功能描述：该函数计算 $\text{expression}/(\text{sum}(\text{expression}))$ 的值，它给出相对于总数的百分比，即当前行对 $\text{sum}(\text{expression})$ 的贡献。SAMPLE：下例计算每个员工的工资占该类员工总工资的百分比

```
SELECT last_name, salary, RATIO_TO_REPORT(salary) OVER () AS rr
FROM employees
WHERE job_id = PU_CLERK.
```

LAST_NAME	SALARY	RR
Khoo	3100	.223021583
Baida	2900	.208633094
Tobias	2800	.201438849
Himuro	2600	.18705036
Colmenares	2500	.179856115

。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(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(expr1)的

平均值，去掉了空对(expr1, expr2)后，等

于AVG(expr1)REGR_SXX：返回值等于REGR_COUNT(expr1, expr2) * VAR_POP(expr2)

REGR_SYY：返回值等于REGR_COUNT(expr1, expr2) * VAR_POP(expr1)

REGR_SXY：返回值等于REGR_COUNT(expr1, expr2) * COVAR_POP(expr1, 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

187212 12 -68 187212 13 -20.244898 1254.3673512 13 -20.244898

1254.3673512 19 -18.826087 128712 20 62.4561404 125.2865512 20

62.4561404 125.2865512 20 62.4561404 125.2865512 20 62.4561404

125.2865512 26 67.2658228 58.971231312 26 67.2658228

58.971231312 27 37.5245541 284.95822112 27 37.5245541

284.95822112 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 tWHERE s.time_id = t.time_id AND t.fiscal_year = 1998
AND t.fiscal_month_number = 4.DAY_NUMBER_IN_MONTH
Regr_Count-----1 8252 16503 24754
3300.26 2145030 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 tWHERE
s.time_id = t.time_idAND t.fiscal_year = 1998GROUP BY
t.fiscal_month_numberORDER BY
t.fiscal_month_number.FISCAL_MONTH_NUMBER
Regr_R2-----12 13 .9273729844
.8070199725 .9327455676 .946828617 .9653420118 .9557680759
.95954261810 .93861857511 .88093141512 .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_s
old, s.quantity_sold)OVER (ORDER BY t.fiscal_month_desc,
t.day_number_in_month)"Regr_AvgX"FROM sales s, times
tWHERE s.time_id = t.time_id AND s.prod_id = 260AND
```

t.fiscal_month_desc = 1998-12AND t.fiscal_week_number IN (51, 52)ORDER BY

t.day_number_in_month.DAY_NUMBER_IN_MONTH

Regr_AvgY Regr_AvgX-----14

882 24.514 882 24.515 801 22.2515 801 22.2516 777.6 21.618

642.857143 17.857142918 642.857143 17.857142920 589.5 16.37521

544 15.111111122 592.363636 16.454545522 592.363636

16.454545524 553.846154 15.384615424 553.846154 15.384615426

522 14.527 578.4 16.0666667SAMPLE 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SELECT

t.day_number_in_month,REGR_SXY(s.amount_sold,

s.quantity_sold)OVER (ORDER BY t.fiscal_year,

t.fiscal_month_desc) "Regr_sxy",REGR_SYY(s.amount_sold,

s.quantity_sold)OVER (ORDER BY t.fiscal_year,

t.fiscal_month_desc) "Regr_syy",REGR_SXX(s.amount_sold,

s.quantity_sold)OVER (ORDER BY t.fiscal_year,

t.fiscal_month_desc) "Regr_sxx"FROM sales s, times tWHERE

s.time_id = t.time_id AND prod_id IN (270, 260)AND

t.fiscal_month_desc = 1998-02AND t.day_number_in_week IN

(6,7)ORDER BY

t.day_number_in_month.DAY_NUMBER_IN_MONTH Regr_sxy

Regr_syy Regr_sxx-----

-----1 18870.4 2116198.4 258.41 18870.4 2116198.4 258.41

18870.4 2116198.4 258.41 18870.4 2116198.4 258.47 18870.4

2116198.4 258.48 18870.4 2116198.4 258.414 18870.4 2116198.4

258.415 18870.4 2116198.4 258.421 18870.4 2116198.4 258.422
18870.4 2116198.4 258.4 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