

Exercise #1

1. Copy table DEMO_PRODUCT_INFO of user DARMONT onto your account.
2. Write an anonymous PL/SQL block that displays the name and price of the 5 most expensive products in table DEMO_PRODUCT_INFO.

Hints:

- Use a cursor that lists products by descending order of prices.
- Use an ad-hoc cursor scan that stops after 5 rows have been read.

Exercise #2

In order to establish a correlation, we wish to know the difference in average quantity between two orders from an ORD table. Table ORD may be filled with either valued orders (i.e., with a non NULL quantity) or not. Non-valued orders must not be taken into account. Write an anonymous PL/SQL block that computes the difference in average quantity for all orders. To simplify, table ORD may be reduced to one attribute, QTY.

Example:

| QTY |
|------|
| 5 |
| NULL |
| 10 |
| 8 |
| 9 |
| 13 |

Expected result = (|10 – 5| + |8 – 10| + |9 – 8| + |13 – 9|) / 4 = 3

Hints:

- Copy table ORD of user DARMONT onto your account.
- Use a cursor that fetches only valued quantities.
- With an ad-hoc cursor scan, read the first quantity. Then, for each subsequent quantity, cumulate the absolute value (function ABS) of *current quantity – previous quantity*.
- Exception: table ORD contains fewer than two valued orders.

Exercise #3

We want to sample table EMP from Labwork #1. Write an anonymous PL/SQL block that scans table EMP and displays on screen employee names (ordered by employee number) whose appearance ranks in the table are: 1st, 3rd, 6th, 10th, 15th...

Rank computation rule:

$$\begin{aligned} \frac{1}{3} &= 0 + 1 \\ \frac{3}{6} &= \frac{1}{3} + 2 \\ \frac{6}{10} &= \frac{3}{6} + 3 \\ \frac{10}{15} &= \frac{6}{10} + 4 \\ &\dots \end{aligned}$$

Expected result:

1: SMITH
 3: WARD
 6: BLAKE
 10: TURNER
 ...

Hint: Use an ad-hoc cursor scan in which *n-1* rows are read before displaying an employee (with *n* = 1, 2, 3...; this is the number in italics in the rank computation rule).