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| EPAM Systems, RD Dep. |
| Report 05. Advanced PL/SQL |

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Contents

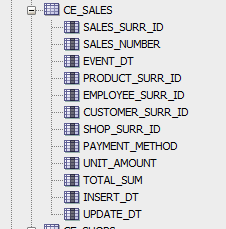
[1. Таблица фактов. 3](#_Toc500081610)

[2. Пакет генерации 3](#_Toc500081611)

[3. Результат на уровне BL\_3NF 5](#_Toc500081612)

# Таблица фактов.

На уровне BL\_3NF у меня одна таблица фактов, которая имеет структуру, которая показана на рисунке:



# Пакет генерации

Ниже приведен код, с помощью которого была произведена генерация данных для таблицы фактов:

PROCEDURE insert\_table\_sales

IS

BEGIN

EXECUTE IMMEDIATE ('TRUNCATE TABLE cls\_sales');

BEGIN

FOR i IN 1..1000000

LOOP

dbms\_random.seed

(

i \* 5

)

;

INSERT INTO cls\_sales

( sales\_number,

event\_dt,

product\_id,

employee\_id,

customer\_id,

shop\_id,

payment\_method,

unit\_amount,

total\_sum

)

SELECT

sal.sales\_number,

TRUNC(sal.event\_dt),

sal.product\_id,

sal.employee\_id,

sal.customer\_id,

sal.shop\_id,

sal.payment\_method,

sal.unit\_amount,

ce.price\*unit\_amount\*(1-(cus.discount/100)) as total\_sum

FROM

(

SELECT

trunc( dbms\_random.value( 100000000, 999999999 ) ) as sales\_number,

to\_date( trunc (

dbms\_random.value (

( SELECT to\_char( MIN ( date\_dt ), 'J' ) FROM ce\_date ),

( SELECT to\_char( MAX ( date\_dt ), 'J' ) FROM ce\_date )

)

), 'J' ) as event\_dt,

round ( dbms\_random.value (

( SELECT MIN ( product\_surr\_id ) FROM ce\_products ) ,

( SELECT MAX ( product\_surr\_id ) FROM ce\_products )

)

) as product\_id,

round ( dbms\_random.value (

( SELECT MIN ( employee\_surr\_id ) FROM ce\_employees ) ,

( SELECT MAX ( employee\_surr\_id ) FROM ce\_employees )

)

) as employee\_id,

round ( dbms\_random.value (

( SELECT MIN ( customer\_surr\_id ) FROM ce\_customers ) ,

( SELECT MAX ( customer\_surr\_id ) FROM ce\_customers )

)

) as customer\_id,

round ( dbms\_random.value (

( SELECT MIN ( shop\_surr\_id ) FROM ce\_shops ) ,

( SELECT MAX ( shop\_surr\_id ) FROM ce\_shops )

)

) as shop\_id,

(SELECT CASE

WHEN (SELECT

abs(trunc(dbms\_random.normal))

FROM dual)=1

THEN 'Наличные деньги'

WHEN (SELECT

abs(trunc(dbms\_random.normal))

FROM dual)=0

THEN 'Кредитная карта'

ELSE 'Наличные деньги'

END

FROM dual) as payment\_method,

round ( dbms\_random.value ( 1 , 10 ) ) as unit\_amount

FROM dual)sal

JOIN ce\_products ce ON sal.product\_id=ce.product\_surr\_id

JOIN ce\_customers cus ON sal.customer\_id=cus.customer\_surr\_id;

END LOOP;

END;

COMMIT;

EXCEPTION

WHEN OTHERS

THEN RAISE;

END insert\_table\_sales;

# Результат на уровне BL\_3NF

