

Adatbázis-kezelés

Házi feladat

A kód:

```
CREATE OR REPLACE PROCEDURE mb19_csobor_zzmdfe (  
    sema_p IN VARCHAR2,  
    tabla_p IN VARCHAR2  
) IS
```

```
    CURSOR c_valtozo (  
        c_param_sema VARCHAR2,  
        c_param_tabla VARCHAR2  
) IS  
    ( SELECT  
        owner,  
        table_name,  
        column_name  
    FROM  
        all_tab_columns  
    WHERE  
        lower(data_type) = 'number'  
        AND lower(owner) = lower(sema_p)  
        AND lower(table_name) = lower(tabla_p)  
    );
```

```
    CURSOR mindenekurzor IS  
    ( SELECT  
        owner,  
        table_name,  
        column_name,  
        data_type  
    FROM  
        all_tab_columns  
    );
```

```
c_sor      c_valtozo%rowtype;
tablename  VARCHAR2(50) := tabla_p;
semane     VARCHAR2(50) := sema_p;
sqlparancs VARCHAR2(10000);

--exception részhez

tablecount NUMBER := 0;
schemacount NUMBER := 0;
numbercount NUMBER := 0;
schema_not_found EXCEPTION;
table_not_found EXCEPTION;
number_not_found EXCEPTION;

--numerikus változók megadása

d_count    NUMBER;
d_mean     NUMBER;
d_std      NUMBER;
d_min      NUMBER;
d_p25      NUMBER;
d_p50      NUMBER;
d_p75      NUMBER;
d_max      NUMBER;

BEGIN

--séma, tábla és numerikus attribútumok ellenőrzése

FOR sor IN mindenekszor LOOP IF lower(sor.owner) = lower(sema_p) THEN
    schemacount := schemacount + 1;

    IF lower(sor.table_name) = lower(tabla_p) THEN
        tablecount := tablecount + 1;

        IF lower(sor.data_type) = 'number' THEN
            numbercount := numbercount + 1;
        END IF;
    END IF;
END IF;

END LOOP;
```

--saját exception-ok létrehozása

```
IF schemacount = 0 THEN
    RAISE schema_not_found;
END IF;

IF tablecount = 0 THEN
    RAISE table_not_found;
END IF;

IF numbercount = 0 THEN
    RAISE number_not_found;
END IF;
```

--ha nincs hiba, eredmény kiírása

```
IF numbercount > 0 THEN
    OPEN c_valtozo(sema_p, tabla_p);
    FETCH c_valtozo INTO c_sor;
```

--fejléc létrehozása

```
dbms_output.put_line("");
dbms_output.put_line(lpad('TABLE.COLUMN', 35)
    || lpad('COUNT', 12)
    || lpad('MEAN', 12)
    || lpad('STD', 12)
    || lpad('MIN', 12)
    || lpad('P25', 12)
    || lpad('P50', 12)
    || lpad('P75', 12)
    || lpad('MAX', 12));
```

LOOP

```
EXIT WHEN c_valtozo%notfound;

sqlparancs := 'select count('
    || c_sor.column_name
    || '),
avg ('
    || c_sor.column_name
    || '),
```

```
stddev ('
|| c_sor.column_name
|| '),
min ('
|| c_sor.column_name
|| '),
percentile_disc(0.25) within group (order by '
|| c_sor.column_name
|| '),
percentile_disc(0.5) within group (order by '
|| c_sor.column_name
|| '),
percentile_disc(0.75) within group (order by '
|| c_sor.column_name
|| '),
max ('
|| c_sor.column_name
|| ')
from '
|| semanev
|| ':'
|| tablanev;
```

EXECUTE IMMEDIATE sqlparancs

INTO

```
d_count,
d_mean,
d_std,
d_min,
d_p25,
d_p50,
d_p75,
d_max;
```

```
        dbms_output.put_line(lpad(lower(c_sor.table_name)
                                || ' '
                                || lower(c_sor.column_name), 35)
                                || lpad(TO_CHAR(d_count, '9999999999'), 12)
                                || lpad(TO_CHAR(d_mean, '9.99EEEE'), 12)
                                || lpad(TO_CHAR(d_std, '9.99EEEE'), 12)
                                || lpad(TO_CHAR(d_min, '9.99EEEE'), 12)
                                || lpad(TO_CHAR(d_p25, '9.99EEEE'), 12)
                                || lpad(TO_CHAR(d_p50, '9.99EEEE'), 12)
                                || lpad(TO_CHAR(d_p75, '9.99EEEE'), 12)
                                || lpad(TO_CHAR(d_max, '9.99EEEE'), 12));

        FETCH c_valtozo INTO c_sor;

    END LOOP;

END IF;

CLOSE c_valtozo;

EXCEPTION

    WHEN schema_not_found THEN

        dbms_output.put_line('Schema does not exist.');
```

```
    WHEN table_not_found THEN

        dbms_output.put_line('Table does not exist.');
```

```
    WHEN number_not_found THEN

        dbms_output.put_line('Table with no NUMBER attributes.');
```

```
END;
```

```
/
```

Próbafuttatás:

set serveroutput on

BEGIN

 mb19_csobor_zzmdfe('mb18__db', 'historyitems');

END;

/

TABLE.COLUMN	COUNT	MEAN	STD	MIN	P25	P50	P75	MAX
historyitems.id	338	1.29E+04	2.51E+03	1.00E+04	1.01E+04	1.50E+04	1.52E+04	1.53E+04
historyitems.user_id	338	2.34E+01	1.26E+01	6.00E+00	6.00E+00	2.40E+01	3.00E+01	5.80E+01
historyitems.audio_id	338	4.93E+02	4.04E+02	2.20E+01	1.44E+02	2.88E+02	1.00E+03	1.01E+03
historyitems.started_at_zone	338	5.96E+01	1.03E+01	.00E+00	6.00E+01	6.00E+01	6.00E+01	1.20E+02
historyitems.duration	338	8.30E+01	2.56E+02	.00E+00	.00E+00	6.00E+00	4.60E+01	3.66E+03
historyitems.rating	338	1.48E-01	5.52E-01	.00E+00	.00E+00	.00E+00	.00E+00	3.00E+00
historyitems.created_at_zone	338	5.96E+01	1.03E+01	.00E+00	6.00E+01	6.00E+01	6.00E+01	1.20E+02
historyitems.updated_at_zone	338	1.38E+00	1.05E+01	-7.50E+01	.00E+00	.00E+00	.00E+00	6.00E+01
historyitems.flags	338	8.68E+00	6.24E+00	.00E+00	5.00E+00	5.00E+00	1.70E+01	1.70E+01