

```
CREATE USER user_name
IDENTIFIED {BY password | EXTERNALLY
            | GLOBALLY AS 'CN=user' }
[ DEFAULT TABLESPACE tablespace ]
[ TEMPORARY TABLESPACE tablespace ]
[ QUOTA { number [K|M] | UNLIMITED } ON tablespace ]
  [, QUOTA { number [K|M] | UNLIMITED } ON tablespace ]
[ PROFILE profile_name ]
[ PASSWORD EXPIRE ]
[ { ACCOUNT LOCK | ACCOUNT UNLOCK } ]
```

```
CREATE TABLE [schema.] table_name
[
  ( { column_name datatype [DEFAULT expr]
    [{ column_constraint }][...]
    |
    table_constraint
    }][...] )

column_constraint ::=
[CONSTRAINT constraint_name]
{
[NOT] NULL
|
{UNIQUE | PRIMARY KEY}
|
REFERENCES [schema.] table_name [ (column_name1
                                [,column_name2, ...] ) ]

  [ON DELETE CASCADE ]
|
CHECK (condition)
}

table_constraint ::=
[CONSTRAINT constraint_name]
{
{ UNIQUE | PRIMARY KEY} ( { column_name1 } [,column_name2,
                                ...] )
|
FOREIGN KEY (column_name1 [,column_name2, ...] )
  REFERENCES [schema.] table_name
    [ column_name1 [,column_name2, ...]] [ON DELETE CASCADE ]
|
CHECK (condition)
}
```

```
DROP TABLE table_name [ CASCADE CONSTRAINTS | PURGE ];
```

```
PURGE TABLE table_name;
PURGE INDEX index_name;
PURGE RECYCLEBIN;
PURGE TABLESPACE tablespace_name;
PURGE TABLESPACE tablespace_name USER user_name;
```

```
FLASHBACK TABLE table_name TO BEFORE DROP;
FLASHBACK TABLE table_name TO BEFORE DROP
    RENAME TO new_table_name;
```

```
CREATE [UNIQUE] INDEX index_name
    ON table_name (column_name1 [ASC | DESC], ...);
```

```
DROP INDEX index_name;
```

```
CREATE SEQUENCE sequence_name
    [ INCREMENT BY integer_value ]
    [ START WITH integer_value ]
    [ {MAXVALUE integer_value | NOMAXVALUE } ]
    [ {MINVALUE integer_value | NOMINVALUE } ]
    [ {CYCLE | NOCYCLE} ]
    [ {CACHE positive_integer_value | NOCACHE } ]
    [ {ORDER | NOORDER } ];
```

```
ALTER SEQUENCE sequence_name INCREMENT BY integer_value;
ALTER SEQUENCE sequence_name MAXVALUE integer_value;
ALTER SEQUENCE sequence_name {CYCLE | NOCYCLE };
ALTER SEQUENCE sequence_name
    {CACHE positive_integer_value | NOCACHE};
ALTER SEQUENCE sequence_name {ORDER | NOORDER};
```

```
DROP SEQUENCE sequence_name;
```

```
schema_name.object_name@dblink_name
schema_name.object_name
object_name
```

```
INSERT INTO table_name [(column_list)]
{
    VALUES (list_of_values)
|
    SELECT-statement
}
```

```
DELETE FROM table_name
    [WHERE conditions];
```

```
UPDATE table_name SET
{
    column_name1 = expression1 [,...]
    |
    {      (column_list)
      |
      *
    } = (expression_list)
}
[WHERE conditions]
```

```
SELECT [ALL | DISTINCT]
{ *| column_name1| function_name1[(parameters1)] } [,...]
FROM table_reference1 [table_alias1] [,...]
[WHERE conditions]
[GROUP BY column_list]
[HAVING conditions]
[ORDER BY column_list [ASC | DESC],...]
```

```
FROM table_name1 [table_alias1]
{  [{LEFT|RIGHT|FULL}[OUTER]] JOIN table_name2
    [table_alias2]
    { ON (join_conditions1) | USING(column_list_join1) }
  |
  [INNER] JOIN table_name3 [table_alias3]
    { ON (join_conditions3) | USING(column_list_join3) }

  | {CROSS | NATURAL [INNER]} JOIN table_name4
    [table_alias4] }
```

```
vyraz relacny-operator vyraz
vyraz [NOT] BETWEEN vyraz AND vyraz
vyraz [NOT] IN (polozky)
meno_stlpca [NOT] LIKE 'string' [ESCAPE escape-znak]
vyraz relacny-operator {ALL | [ANY | SOME]} (SELECT-prikaz)
vyraz [NOT] IN (SELECT-prikaz)
vyraz [NOT] EXISTS (SELECT-prikaz)
meno_stlpca IS [NOT] NULL
```

```
SELECT-statement1
{UNION [ALL] | INTERSECT | MINUS }
SELECT-statement2
[ {UNION [ALL] | INTERSECT | MINUS }
  SELECT-statement3
] ...
```

```

SUBSTR(string, m [,n])
LENGTH(string)
UPPER(string)
LOWER(string)
INITCAP(string)
Operátor ||
CONCAT(string1, string2)
INSTR(string, substring, [m[,n]])

```

```

LIKE '%\_%' ESCAPE '\';
%   ľubovoľný počet znakov
_   jeden znak

```

```

ABS(expression)
ROUND(n [,m])
TRUNC(n [,m])

```

```

ALTER SESSION
    SET nls_date_format='DD.MM.YYYY HH24:MI:SS';
ALTER SESSION
    SET nls_timestamp_format='DD.MM.YYYY HH24:MI:SS:FF';
ALTER SESSION
    SET nls_date_language='English';
ALTER SESSION
    SET nls_territory='Slovakia';
        -- 1 (číslo dňa) - pondelok
ALTER SESSION
    SET nls_territory= 'America';
        -- 1 (číslo dňa) - nedeľa

```

```

TO_CHAR(date_value, [format [, nls_param] ])
TO_DATE(string_value, [format [, nls_param]])

```

```

SYSDATE
SYSTIMESTAMP

```

```

ADD_MONTHS(d,n)
NEXT_DAY(d, day_value)
LAST_DAY(d)
TRUNC(d [, format])
ROUND(d [, format])
EXTRACT(format FROM d)
MONTHS_BETWEEN(d1, d2)

```

```
COALESCE(expr1, expr2, ..., exprn)
DECODE(expression, if1, then1 [, ifn, thenn] [, else])
NVL(expression1, expression2)
NVL2(expression1, expression2, expression3)
```

```
case expression
  when value1 then result1
  [when valuen then valuen] [...]
  [else result]
end
```

```
case
  when condition1 then result1
  [when conditionn then resultn] [...]
  [else result]
end
```

**ROWID**

**USER**

```
row_number() over ( [ partition by vyraz ]
                     ORDER BY zoznam_stlpcov )
rank() over ( [ partition by vyraz ]
               ORDER BY zoznam_stlpcov )
dense_rank() over ( [ partition by vyraz ]
                     ORDER BY zoznam_stlpcov )
```

```
GRANT database_privilege_list
  TO {PUBLIC | list_of_users}
  [WITH ADMIN OPTION]
```

```
GRANT object_privilege_list ON object_name
  TO {PUBLIC | list_of_users }
  [WITH GRANT OPTION]
```

```
REVOKE { privilege_name ON object_name
          |
          database_privilege_name
          |
          role_name}
  FROM {PUBLIC | list_of_users }
```

```
CREATE ROLE role_name;
```

```
BEGIN WORK
COMMIT [WORK]
ROLLBACK [WORK]
SAVEPOINT savepoint_name
ROLLBACK TO SAVEPOINT savepoint_name
```

```
IF condition THEN
    statements;
END IF;
```

```
IF condition1 THEN
    statements;
ELSIF condition2 THEN
    statements;
[ELSE
    statements;]
END IF;
```

```
IF condition THEN
    statements;
[ELSE
    statements;]
END IF;
```

```
LOOP
    ...
    IF condition THEN
        EXIT;
    END IF;
    ...
END LOOP;
```

```
LOOP
    ...
    EXIT WHEN condition;
END LOOP;
```

```
WHILE condition LOOP
    statements;
END LOOP;
```

```
FOR variable_name IN min..max LOOP
    statements;
END LOOP;
```

```
FOR variable_name IN REVERSE min..max LOOP
    statements;
END LOOP;
```

```
[DECLARE                -- cast deklaracii
    variable_name  data_type[:= init_value];
]
BEGIN
    statements;      -- cast prikazov
[EXCEPTION            -- cast odchytenia a spracovania vynimiek
    WHEN exception_type1 THEN
        statements;
    WHEN exception_type2 THEN
        statements;
    ...
]
END;
/
```

```
CREATE [OR REPLACE] PROCEDURE procedure_name
    [( parameter1 [ mode1] data_type1,
      parameter2 [ mode2] data_type2, . . .)]
IS|AS
    [ variable_name  data_type[:= init_value]; ]
BEGIN
    statements;
    [ EXCEPTION
        WHEN exception_type1 THEN
            statements;
        [WHEN ...]
    ]
END [procedure_name];
/
```

```
CREATE [OR REPLACE] FUNCTION function_name
    [( parameter1 [ mode1] datatype1,
      parameter2 [ mode2] datatype2, . . .)]
RETURN datatype
IS|AS
    [ variable_name  data_type[:= init_value]; ]
BEGIN
    statements;
    RETURN expression;
    [ EXCEPTION
        WHEN exception_type1 THEN
            statements;
        [WHEN ...]
    ]
END [function_name];
/
```

```
DROP PROCEDURE procedure_name;
```

```
DROP FUNCTION function_name;
```

```
RAISE_APPLICATION_ERROR  
    (error_code, error_text[, {TRUE | FALSE} ]);
```

```
CREATE [OR REPLACE] TRIGGER [schema.] trigger  
{ {BEFORE | AFTER }  
  {DELETE | INSERT | UPDATE [ OF column1 [, column2 [,...]]]}  
  [ OR {DELETE | INSERT | UPDATE [ OF column1 [, column2  
                                                                    [,...]] ] ] } } [...] ]  
|  
  INSTEAD OF {DELETE | INSERT | UPDATE } }  
ON [schema.] [table_name | view_name]  
[ REFERENCING { OLD [AS] stary | NEW [AS] novy} ]  
[ FOR EACH ROW ]  
[ WHEN (condition) ]  
    Ttrigger_body
```

```
ALTER TRIGGER [schema.] trigger_name    {ENABLE | DISABLE};
```

```
ALTER TABLE [schema.] table_name    {ENABLE | DISABLE}  
    ALL TRIGGERS;
```

```
DROP TRIGGER [schema.] trigger_name ;
```

```
CREATE [OR REPLACE] [ FORCE | NOFORCE ]  
VIEW [schema.] view_name [(column_alias1 [,...])]   
    AS Select_statements  
    [WITH [ READ ONLY |  
          CHECK OPTION [CONSTRAINT constraint_def] ] ]
```

```
SELECT zoznam_stlpcov  
    INTO zoznam_premennych  
FROM table_list
```

```
SELECT expr1,      expr2 ...,      exprn  
    BULK COLLECT INTO var1,      var2 ..,      varn  
FROM table_list
```

```
OPEN cursor_name;  
FETCH cursor_name INTO list_of_variables;  
CLOSE cursor_name;
```

```
cursor_name%ISOPEN  
cursor_name%FOUND  
cursor_name%NOTFOUND  
cursor_name%ROWCOUNT
```