Вход 1

```
SELECT LastName, FirstName
FROM Person.Person
WHERE BusinessEntityID IN
(SELECT BusinessEntityID
FROM HumanResources.Employee
WHERE BusinessEntityID IN
(SELECT BusinessEntityID
FROM Sales.SalesPerson)
);
```

Выход 1

```
RootQueryNode(

  queries=[

    QueryNode(

      query_statements=[

        FactoredStatementNode(

          select_parts=[

            SelectNode(

              columns=[

                ExprNode(database_name=None, table_name=None, column_name='LastName',
select_stmt=None),

                ExprNode(database_name=None, table_name=None, column_name='FirstName',
select_stmt=None),

                ],

                tables=[Table_or_subquery(table_name='Person', schema_name='Person', DOT='.',
table_alias=None, K_INDEXED=None, K_BY=None, index_name=None, K_NOT=None, K_AS=None,
table_function_name=None, OPEN_PAR=None, CLOSE_PAR=None, expr=[], COMMA=[],
table_or_subquery=[], join_clause=None, select_stmt=None)],

                where=ExprNode(

                  database_name=None,

                  table_name=None,

                  column_name=None,

                  select_stmt=[

                    Select_or_values(

                      K_SELECT='SELECT',

                      result_column=[ExprNode(database_name=None, table_name=None,
column_name='BusinessEntityID', select_stmt=None)],

                      COMMA=[],
```

```
K_FROM='FROM',

K_WHERE='WHERE',

expr=[

  ExprNode(

    database_name=None,

    table_name=None,

    column_name=None,

    select_stmt=[

      Select_or_values(

        K_SELECT='SELECT',

        result_column=[ExprNode(database_name=None, table_name=None,
column_name='BusinessEntityID', select_stmt=None)],

        COMMA=[],

        K_FROM='FROM',

        K_WHERE=None,

        expr=[],

        K_GROUP=None,

        K_BY=None,

        K_DISTINCT=None,

        K_ALL=None,

        table_or_subquery=[Table_or_subquery(table_name='SalesPerson',
schema_name='Sales', DOT='.', table_alias=None, K_INDEXED=None, K_BY=None, index_name=None,
K_NOT=None, K_AS=None, table_function_name=None, OPEN_PAR=None, CLOSE_PAR=None, expr=[],
COMMA=[], table_or_subquery=[], join_clause=None, select_stmt=None)],

        join_clause=None,

        K_HAVING=None,

        K_VALUES=None,

        OPEN_PAR=[],

        CLOSE_PAR=[],

      ),

    ],

  ),

],

K_GROUP=None,
```

Вход 2

```
SELECT *
FROM (
SELECT Author, stock
FROM books
GROUP BY author
) AS results
WHERE author="Robin Sharma";
```

Выход 2

RootQueryNode(

```
queries=[
    QueryNode(
        query_statements=[
            FactoredStatementNode(
                select_parts=[
                    SelectNode(
                        columns=[
                            '*',
                        ],
                        tables=[
                            Table_or_subquery(
                                table_name=None,
                                schema_name=None,
                                DOT=None,
                                table_alias='results',
                                K_INDEXED=None,
                                K_BY=None,
                                index_name=None,
                                K_NOT=None,
                                K_AS='AS',
                                table_function_name=None,
                                OPEN_PAR='(',
                                CLOSE_PAR=')',
                                expr=[],
                                COMMA=[],
                                table_or_subquery=[],
                                join_clause=None,
                                select_stmt=[
                                    Select_or_values(
                                        K_SELECT='SELECT',
                                        result_column=[
                                            ExprNode(database_name=None, table_name=None,
column_name='Author', select_stmt=None),
```

```
                            ExprNode(database_name=None, table_name=None, column_name='stock',
select_stmt=None),
                        ],
                        COMMA=[
                          ',',
                        ],
                        K_FROM='FROM',
                        K_WHERE=None,
                        expr=[ExprNode(database_name=None, table_name=None,
column_name='author', select_stmt=None)],
                        K_GROUP='GROUP',
                        K_BY='BY',
                        K_DISTINCT=None,
                        K_ALL=None,
                        table_or_subquery=[
                          'books',
                        ],
                        join_clause=None,
                        K_HAVING=None,
                        K_VALUES=None,
                        OPEN_PAR=[],
                        CLOSE_PAR=[],
                      ),
                    ],
                  ),
                ],
                where=ExprNode(database_name=None, table_name=None, column_name=None,
select_stmt=None),
                group_by=None,
                having=None,
              ),
            ],
            operators=None,
```

```
            ),
        ],
    ),
  ],
)


Вход 3

SELECT members.firstname || ' ' || members.lastname
AS "Full Name"
FROM borrowings
INNER JOIN members
ON members.memberid=borrowings.memberid
INNER JOIN books
ON books.bookid=borrowings.bookid
WHERE borrowings.bookid IN (SELECT bookid
FROM books)
GROUP BY members.firstname, members.lastname;

Выход 3

RootQueryNode(

  queries=[

    QueryNode(

      query_statements=[

        FactoredStatementNode(

          select_parts=[

            SelectNode(

              columns=[

                Result_column(

                  STAR=None,

                  table_name=None,

                  DOT=None,

                  expr=ExprNode(database_name=None, table_name=None, column_name=None,
select_stmt=None),

                  column_alias='"Full Name"',

                  K_AS='AS',

                ),

              ],

              tables=None,
```

```
                    where=ExprNode(
                        database_name=None,
                        table_name=None,
                        column_name=None,
                        select_stmt=[
                            Select_or_values(
                                K_SELECT='SELECT',
                                result_column=[ExprNode(database_name=None, table_name=None,
column_name='bookid', select_stmt=None)],
                                COMMA=[],
                                K_FROM='FROM',
                                K_WHERE=None,
                                expr=[],
                                K_GROUP=None,
                                K_BY=None,
                                K_DISTINCT=None,
                                K_ALL=None,
                                table_or_subquery=[
                                    'books',
                                ],
                                join_clause=None,
                                K_HAVING=None,
                                K_VALUES=None,
                                OPEN_PAR=[],
                                CLOSE_PAR=[],
                            ),
                        ],
                    ),
                    group_by=[
                        ExprNode(database_name=None, table_name='members', column_name='firstname',
select_stmt=None),
                        ExprNode(database_name=None, table_name='members', column_name='lastname',
select_stmt=None),
```

```
                    ],
                    having=None,
                ),
            ],
            operators=None,
        ),
    ],
),
]
)
```