```abap
*&---------------------------------------------------------------------*
*& Report ZQKEBW001_00
*&---------------------------------------------------------------------*
*& Авторстопом по АБАПу
*& Василий Ковальский - Vasili Kovalski
*& QK0001.New Open SQL syntaxis
*& BW001. 11. Inline Declarations. SELECT SINGGLE ,
*&---------------------------------------------------------------------*
REPORT ZQKEBW001_11.
start-of-selection.

  SELECT SINGLE carrid, connid, cityfrom, cityto FROM spfli INTO @DATA(gs).

end-of-selection.
  zcl_qke02_srv=>write_struct_col( gs ).
  skip 2.
  uline.
  write: / 'BOT TAk!'.
```

```
*&---------------------------------------------------------------------*
*& Report ZQKEBW001_12
*&---------------------------------------------------------------------*
*& Авторстопом по АБАПу
*& Василий Ковальский - Vasili Kovalski
*& QK0001.New Open SQL syntaxis
*& BW001. 12. Inline Declarations. SELECT SINGGLE *
*&---------------------------------------------------------------------*
REPORT ZQKEBW001_12.

start-of-selection.
  SELECT SINGLE * FROM t000 INTO @DATA(gs).

end-of-selection.
  zcl_qke02_srv=>write_struct_col( gs ).
  skip 2.
  uline.
  write: / 'BOT TAk!'.
```

```abap
*&---------------------------------------------------------------------*
*& Report ZQKEBW001_13
*&---------------------------------------------------------------------*
*& Авторстопом по АБАПу
*& Василий Ковальский - Vasili Kovalski
*& QK0001.New Open SQL syntaxis
*& BW001. 13. Inline Declarations. SELECT INTO TABLE
*&---------------------------------------------------------------------*
REPORT ZQKEBW001_13.

start-of-selection.

  SELECT * FROM tactt up to 4 rows INTO TABLE @DATA(gt) .

end-of-selection.
  zcl_qke02_srv=>write_table( gt ).
  skip 2.
  uline.
  write: / 'BOT TAk!'.
```

```abap
*&---------------------------------------------------------------------*
*& Report ZQKEBW001_21
*&---------------------------------------------------------------------*
*& Авторстопом по АБАПу
*& Василий Ковальский - Vasili Kovalski
*& QK0001.New Open SQL syntaxis
*& BW001. 21. Concatenation
*&---------------------------------------------------------------------*
REPORT ZQKEBW001_21.
start-of-selection.

  SELECT
      cityfrom
    , cityto
    , cityfrom && '->' && cityto                 as path   "<=255 char

*   , carrid && connid                           as cc    "  !!! Impossible !!
!
    , CONCAT( carrid, connid )                   as cc

    , CONCAT( cityfrom, CONCAT( '->', cityto ) ) as path2  "<=1333 char
    , CONCAT( 'A','B' )                          as ab
    , CONCAT_WITH_SPACE( 'A','B',1 )             as a1b
    , CONCAT_WITH_SPACE( 'A','B',2 )             as a2b

    FROM spfli INTO TABLE @DATA(gt).

end-of-selection.
  zcl_qke02_srv=>write_table( gt ).
  skip 2.
  uline.
  write: / 'BOT TAk!'.
```

```
*&---------------------------------------------------------------------*
*& Report ZQKEBW001_22
*&---------------------------------------------------------------------*
*& Авторстопом по АБАПу
*& Василий Ковальский - Vasili Kovalski
*& QK0001.New Open SQL syntaxis
*& BW001. 22. Calculation
*&---------------------------------------------------------------------*
REPORT ZQKEBW001_22.

start-of-selection.

  SELECT
      carrid
    , connid
    , fldate
    , seatsmax
    , seatsocc
    , seatsmax - seatsocc AS SEATSFREE
    FROM sflight INTO TABLE @DATA(gt).

end-of-selection.
  zcl_qke02_srv=>write_table( gt ).
  skip 2.
  uline.
  write: / 'BOT TAk!'.
```

```abap
*&---------------------------------------------------------------------*
*& Report ZQKEBW001_23
*&---------------------------------------------------------------------*
*& Авторстопом по АБАПу
*& Василий Ковальский - Vasili Kovalski
*& QK0001.New Open SQL syntaxis
*& BW001. 23. Type casting
*&---------------------------------------------------------------------*
REPORT ZQKEBW001_23.

start-of-selection.

  SELECT
      carrid
    , connid
    , CONCAT( carrid, CAST( connid as char( 4 ) ) )  AS cc
    , fldate
    , seatsmax
    , seatsocc
    , seatsmax - seatsocc AS SEATSFREE
*    , seatsocc * 100 / seatsmax AS PERCENTAGE "  !!! Impossible !!!
    , CAST( seatsocc * 100 AS FLTP ) / CAST( seatsmax AS FLTP ) AS PERCENTAGE
    FROM sflight INTO TABLE @DATA(gt)
    .

end-of-selection.
  zcl_qke02_srv=>write_table( gt ).
  skip 2.
  uline.
  write: / 'BOT TAk!'.
```

```abap
*&---------------------------------------------------------------------*
*& Report ZQKEBW001_24
*&---------------------------------------------------------------------*
*& Авторстопом по АБАПу
*& Василий Ковальский - Vasili Kovalski
*& QK0001.New Open SQL syntaxis
*& BW001. 24. Arihmetic functions ceil, floor, round
*&---------------------------------------------------------------------*
REPORT ZQKEBW001_24.

start-of-selection.

  SELECT
      carrid
    , connid
    , fldate
    , price
    , CEIL( price )      as ceil
    , FLOOR( price )     as floor
    , ROUND( price, 1 )  as r1
    , ROUND( price, -1 ) as r_1

    FROM sflight INTO TABLE @DATA(gt)
  .

end-of-selection.
  zcl_qke02_srv=>write_table( gt ).
  skip 2.
  uline.
  write: / 'BOT TAk!'.
```

```abap
*&---------------------------------------------------------------------*
*& Report ZQKEBW001_25
*&---------------------------------------------------------------------*
*& Авторстопом по АБАПу
*& Василий Ковальский - Vasili Kovalski
*& QK0001.New Open SQL syntaxis
*& BW001. 25. Text functions
*&---------------------------------------------------------------------*
REPORT ZQKEBW001_25.

start-of-selection.

  SELECT
      carrid
    , carrname

    , LENGTH( carrname )          as len
    , INSTR( carrname, 'Air' )    as instr

    , LEFT( carrname, 4 )         as left
    , RIGHT( carrname, 5 )        as right
    , SUBSTRING( carrname, 4, 9 ) as subs
    , REPLACE( carrname, 'a', '@' ) as repl
    , LOWER( carrname )           as lower
    , UPPER( carrname )           as upper

    FROM scarr INTO TABLE @DATA(gt)
  .

end-of-selection.
  zcl_qke02_srv=>write_table( gt ).
  skip 2.
  uline.
  write: / 'BOT TAk!'.
```

```abap
*&---------------------------------------------------------------------*
*& Report ZQKEBW001_26
*&---------------------------------------------------------------------*
*& Авторстопом по АБАПу
*& Василий Ковальский - Vasili Kovalski
*& QK0001.New Open SQL syntaxis
*& BW001. 26. CASE operator
*&---------------------------------------------------------------------*
REPORT ZQKEBW001_26.

start-of-selection.

  SELECT
      carrid
    , connid
    , cityfrom
    , cityto
    , countryfr
    , countryto
    , CASE countryfr
      WHEN countryto THEN 'Home'
      ELSE 'Foreign'
      END                           AS mark

    FROM spfli INTO TABLE @DATA(gt)
  .

end-of-selection.
  zcl_qke02_srv=>write_table( gt ).
  skip 2.
  uline.
  write: / 'BOT TAk!'.
```

```
*&---------------------------------------------------------------------*
*& Report ZQKEBW001_31
*&---------------------------------------------------------------------*
*& Авторстопом по АБАПу
*& Василий Ковальский - Vasili Kovalski
*& QK0001.New Open SQL syntaxis
*& BW001. 31. Aggregate function
*&---------------------------------------------------------------------*
REPORT ZQKEBW001_31.

start-of-selection.

  SELECT
      carrid
    , connid
    , count( * ) as cnt
    , count( distinct seatsocc ) as cnd
    , sum( seatsocc ) as sum
    , min( seatsocc ) as min
    , max( seatsocc ) as max
    , avg( seatsocc ) as avg

    from sflight

    group by carrid, connid into table @data(gt)   " both are possible
*    into table @data(gt) group by carrid, connid   " both are possible
    .
end-of-selection.
  zcl_qke02_srv=>write_table( gt ).
  skip 2.
  uline.
  write: / 'BOT TAk!'.
```

```abap
*&---------------------------------------------------------------------*
*& Report ZQKEBW001_32
*&---------------------------------------------------------------------*
*& Авторстопом по АБАПу
*& Василий Ковальский - Vasili Kovalski
*& QK0001.New Open SQL syntaxis
*& BW001. 32. Aggregate function. New
*&---------------------------------------------------------------------*
REPORT ZQKEBW001_32.

start-of-selection.

  SELECT
      carrid
    , connid
*    , count( * ) as cnt
*    , count( distinct seatsocc ) as cnd
*    , sum( seatsocc ) as sum
    , min( seatsocc ) as min
    , max( seatsocc ) as max
    , avg( seatsocc ) as avg

    , median(  seatsocc ) as median
*   , stddev(  seatsocc ) as stddev              " !!! impossible !!!
    , stddev( cast( seatsocc as FLTP ) ) as stddev
*   , var( seatsocc ) as var                     " !!! impossible !!!
    , var( cast( seatsocc as D34N ) ) as var
    , corr( paymentsum, seatsocc ) as corr

    from sflight
*    into table @data(gt) group by carrid, connid  " !!! impossible !!!
    group by carrid, connid into table @data(gt)  " Possible
  .

end-of-selection.
  zcl_qke02_srv=>write_table( gt ).
  skip 2.
  uline.
  write: / 'BOT TAk!'.
```

```abap
*&---------------------------------------------------------------------*
*& Report ZQKEBW001_32
*&---------------------------------------------------------------------*
*& Авторстопом по АБАПу
*& Василий Ковальский - Vasili Kovalski
*& QK0001.New Open SQL syntaxis
*& BW001. 99. Union restrictions for Любовь Н.
*&---------------------------------------------------------------------*
REPORT ZQKEBW001_99.

start-of-selection.

  SELECT
      carrid  as id
*      cast( carrid as char( 8 ) )  as id
    , carrname as name
    from scarr
*    UP TO 3 ROWS " With UNION must be after INTO clause, See F1
    where carrname like '%Air%' or carrname like '%air%'

  union select
      cast( id as char( 8 ) )   as id
    , name as name
    from scustom
*    UP TO 3 ROWS " !!! Impossible !!!, See F1
    where name like '%Air%' or name like '%air%'

  order by NAME descending
  into table @data(gt)
*    UP TO 3 ROWS " !!! Impossible !!!, See F1
*    ORDER BY PRIMARY KEY " !!! Impossible !!!
  .
write: / 'No UP TO clause, see F1'.
write: / 'No ORDER BY PRIMARY KEY clause'.
write: / 'Allways does not use Application Server table buffers, See F1'.
write: / 'Allways use Strict ABAP SQL Mode, See F1'.

end-of-selection.
  zcl_qke02_srv=>write_table( gt ).
  skip 2.
  uline.
  write: / 'BOT TAk!'.
```