SAP ABAP 7.4/7.5 New Syntax Topics with Examples

1. Inline Data Declarations

```
DATA(lv_sum) = 5 + 3.
```

2. COND Statement

```
DATA(lv_result) = COND string(
  WHEN sy-subrc = 0 THEN 'Success'
  WHEN sy-subrc = 4 THEN 'No Data'
  ELSE 'Error'
).
```

3. SWITCH Statement

```
DATA(lv_status) = SWITCH string( sy-subrc
  WHEN 0 THEN 'OK'
  WHEN 1 THEN 'Minor Issue'
  ELSE 'Fail'
).
```

4. Purpose of

```
DATA(lv_text) = VALUE string( # 'Auto typed text' ).
```

5. String Expressions

```
DATA(lv_fullname) = |{ lv_firstname } { lv_lastname }|.
```

6. VALUE Expression

```
DATA(lt_numbers) = VALUE int4_tab((1)(2)(3)).
```

7. Use of BASE in VALUE Expression

```
DATA lt_base TYPE STANDARD TABLE OF i WITH EMPTY KEY.

lt_base = VALUE #( ( 1 ) ( 2 ) ).

lt_base = VALUE #( BASE lt_base ( 3 ) ( 4 ) ).
```

8. Corresponding Operator

```
DATA: ls1 TYPE ty_struct1, ls2 TYPE ty_struct2.
ls2 = CORRESPONDING #( ls1 ).
```

9. ALPHA Keyword with IN or OUT

```
\label{eq:data_path} \begin{split} \text{DATA(lv\_matnr)} &= \left|00000001234567890\right|. \\ \text{lv\_matnr} &= \left|\left\{ \text{lv\_matnr ALPHA} = \text{OUT } \right\}\right|. \end{split} \\ \text{" Removes leading zeros} \end{split}
```

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10. Table Expressions

```
DATA(lv\_name) = lt\_emp[id = 'E01']-name.
```

11. LOOP AT GROUPS

```
LOOP AT GROUPS carrid_group ASSIGNING FIELD-SYMBOL(<group>)
GROUP BY spfli-carrid.
WRITE: / <group>-carrid.
ENDLOOP.
```

12. New Keyword for Object Creation

```
DATA(lo_obj) = NEW cl_demo_class( ).
```

13. LET Expression

```
DATA(lv_final) = LET sum = a + b IN sum * 2.
```

14. CONV Operator

```
DATA(lv string) = CONV string( lv int ).
```

15. REDUCE Operator

```
DATA(lv\_sum) = REDUCE i(INIT x = 0 FOR num IN lt\_tab NEXT x = x + num).
```

16. FILTER

```
DATA(lt_filtered) = FILTER #( lt_data USING KEY key_name WHERE field = 'X' ).
```

17. Open SQL - Comma-Separated Columns

```
SELECT carrid, connid, cityfrom, cityto FROM spfli
INTO TABLE @DATA(lt_flights).
```

18. Open SQL - Conditional Statements

```
SELECT carrid,

CASE WHEN cityfrom = 'FRANKFURT' THEN 'Yes' ELSE 'No' END AS from_frankfurt

FROM spfli

INTO TABLE @DATA(lt_flights).
```

19. Open SQL - Literals

```
SELECT * FROM scarr INTO TABLE @DATA(lt_carriers)
WHERE carrid = @'LH'.
```

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20. Open SQL - Aggregate Functions

SELECT COUNT(*) AS total FROM spfli INTO @DATA(lv_count).

21. Open SQL - Arithmetic Functions

SELECT carrid, connid, price * 1.12 AS price_with_tax FROM sflight INTO TABLE @DATA(lt_result).

22. Parallel Cursor - New Syntax

```
LOOP AT lt_header INTO DATA(ls_header).

LOOP AT lt_item INTO DATA(ls_item) FROM sy-tabix WHERE hkey = ls_header-hkey.

" process
ENDLOOP.

ENDLOOP.
```

23. Debugging Complex ABAP Expressions

Use "ABAP Debugger" and press F2 or Right-Click > Display Expression.

24. SQL Window Expression

```
SELECT carrid, connid, RANK() OVER (PARTITION BY carrid ORDER BY price DESC) AS rank FROM sflight
INTO TABLE @DATA(lt ranked).
```

25. SQL Window Function with Frames

```
SELECT carrid, connid,

SUM(price) OVER (PARTITION BY carrid ORDER BY connid ROWS BETWEEN 1 PRECEDING AND

CURRENT ROW) AS sum_price

FROM sflight

INTO TABLE @DATA(lt_window).
```

26. SQL Window Function (Rank and Value)

```
SELECT carrid, connid, price,

RANK() OVER (PARTITION BY carrid ORDER BY price DESC) AS rank

FROM sflight

INTO TABLE @DATA(lt_ranked).
```

27. Indicator Structures

DATA indicator TYPE STRUCTURE indicator structure.