

ORACLE SQL/PLSQL-Frequently Asked Questions

1. Difference between varchar and varchar2 data types?

Varchar can store upto 2000 bytes and varchar2 can store upto 4000 bytes. Varchar will occupy space for NULL values and Varchar2 will not occupy any space. Both are differed with respect to space.

2. In which language Oracle has been developed?

Oracle has been developed using C Language.

3. What is RAW datatype?

RAW datatype is used to store values in binary data format. The maximum size for a raw in a table is 32767 bytes.

4. What is the use of NVL function?

The NVL function is used to replace NULL values with another or given value. Example is –

NVL(Value, replace value)

5. What is an integrity constraint?

An integrity constraint is a declaration defined a business rule for a table column. Integrity constraints are used to ensure accuracy and consistency of data in a database. There are types – Domain Integrity, Referential Integrity and Domain Integrity.

6. What is an ALERT?

An alert is a window which appears in the center of the screen overlaying a portion of the current display.

7. What are the various constraints used in Oracle?

NULL – It is to indicate that particular column can contain NULL values

NOT NULL – It is to indicate that particular column cannot contain NULL values

CHECK – Validate that values in the given column to meet the specific criteria

DEFAULT – It is to indicate the value is assigned to default value

8. What is difference between SUBSTR and INSTR?

SUBSTR returns specific portion of a string and INSTR provides character position in which a pattern is found in a string.

SUBSTR returns string whereas INSTR returns numeric.

9. What is the data type of DUAL table?

The **DUAL** table is a one-column table present in oracle database. The table has a single VARCHAR2(1) column called DUMMY which has a value of 'X'.

10.

11. Whether any commands are used for Months calculation? If so, What are they?

In Oracle, months_between function is used to find number of months between the given dates. Example is –

Months_between(Date 1, Date 2)

12. What is COALESCE function?

COALESCE function is used to return the value which is set to be not null in the list. If all values in the list are null, then the coalesce function will return NULL.

Coalesce(value1, value2,value3,...)

13. What is BLOB datatype?

A BLOB data type is a varying length binary string which is used to store two gigabytes memory. Length should be specified in Bytes for BLOB.

14. What is DML?

Data Manipulation Language (DML) is used to access and manipulate data in the existing objects. DML statements are insert, select, update and delete and it won't implicitly commit the current transaction.

15. How do we display rows from the table without duplicates?

Duplicate rows can be removed by using the keyword DISTINCT in the select statement.

16. What is the usage of Merge Statement?

Merge statement is used to select rows from one or more data source for updating and insertion into a table or a view. It is used to combine multiple operations.

17. What is NULL value in oracle?

NULL value represents missing or unknown data. This is used as a place holder or represented it in as default entry to indicate that there is no actual data present.

18. What is the use of Aggregate functions in Oracle?

Aggregate function is a function where values of multiple rows or records are joined together to get a single value output. Common aggregate functions are –

Average
Count

Sum

19. What do you mean by GROUP BY Clause?

A GROUP BY clause can be used in select statement where it will collect data across multiple records and group the results by one or more columns.

20. What is a sub query and what are the different types of subqueries?

Sub Query is also called as Nested Query or Inner Query which is used to get data from multiple tables. A sub query is added in the where clause of the main query. There are two different types of subqueries A Correlated sub query cannot be as independent query but can reference column in a table listed in the from list of the outer query. Non-Correlated subquery .This can be evaluated as if it were an independent query. Results of the sub query are submitted to the main query or parent query

21. What is cross join?

Cross join is defined as the Cartesian product of records from the tables present in the join. Cross join will produce result which combines each row from the first table with the each row from the second table.

22. What are temporal data types in Oracle?

Oracle provides following temporal data types:

Date Data Type – Different formats of Dates

TimeStamp Data Type – Different formats of Time Stamp

Interval Data Type – Interval between dates and time

23. How do we create privileges in Oracle?

A privilege is nothing but right to execute an SQL query or to access another user object. Privilege can be given as system privilege or user privilege.

```
[sql]GRANT user1 TO user2 WITH MANAGER OPTION;[/sql]
```

24. How do we get field details of a table?

Describe <Table_Name> is used to get the field details of a specified table.

25. What is a View?

View is a logical table which based on one or more tables or views. The tables upon which the view is based are called Base Tables and it doesn't contain data.

26. What is a cursor variable?

A cursor variable is associated with different statements which can hold different values at run time. A cursor variable is a kind of reference type

27. What are cursor attributes?

Each cursor in Oracle has set of attributes which enables an application program to test the state of the cursor. The attributes can be used to check whether cursor is opened or closed, found or not found and also find row count.

28. What is the parameter mode that can be passed to a procedure?

IN, OUT and INOUT are the modes of parameters that can be passed to a procedure.

29. What is the maximum number of triggers that can be applied to a single table?

12 is the maximum number of triggers that can be applied to a single table.

30. What is difference between Cartesian Join and Cross Join?

31. There are no differences between the join. Cartesian and Cross joins are same.

Cross join gives cartesian product of two tables – Rows from first table is multiplied with another table which is called cartesian product.

Cross join without where clause gives Cartesian product.

32.

33. What are SET operators?

SET operators are used with two or more queries and those operators are Union, Union All, Intersect and Minus.

34. How can we delete duplicate rows in a table?

Duplicate rows in the table can be deleted by using ROWID.

35. Differentiate between % ROWTYPE and TYPE RECORD.

% ROWTYPE is used when a query returns an entire row of a table or view. **TYPE RECORD**, on the other hand, is used when a query returns column of different tables or views

36. Differentiate between Syntax and runtime errors.

A syntax error can be easily detected by a PL/SQL compiler. For eg, incorrect spelling. A runtime error is handled with the help of exception-handling section in an PL/SQL block. For eg, SELECT INTO statement, which does not return any rows.

37. What is the fastest query method to fetch data from the table?

You can use ROWID to fetch Row from the table. The use of ROW ID is the fastest query method for fetching data from the table.

38. If a cursor is open, how can we find in a PL SQL Block?

the %ISOPEN cursor status variable can be used

39. What packages are available to PL SQL developers?

DBMS_ series of packages, such as, DBMS_PIPE, DBMS_DDL, DBMS_LOCK, DBMS_ALERT, DBMS_OUTPUT, DBMS_JOB, DBMS_UTILITY, DBMS_SQL, DBMS_TRANSACTION, UTL_FILE.

40. Explain TTITLE and BTITLE.

TTITLE and BTITLE commands that control report headers and footers.