

What is Oracle table?

- A table is the basic unit of data storage in an Oracle database. The tables of a database hold all of the user accessible data. Table data is stored in rows and columns.

<http://questionsdoor.com/oracle-interview-questions/>

What are Clusters?

- Clusters are groups of one or more tables physically stores together to share common columns and are often used together.

What is an Index?

- An Index is an optional structure associated with a table to have direct access to rows, which can be created to increase the performance of data retrieval. Index can be created on one or more columns of a table.

What are the advantages of views?

- Provide an additional level of table security, by restricting access to a predetermined set of rows and columns of a table.
- Hide data complexity.
- Simplify commands for the user.
- Present the data in a different perspective from that of the base table
- Store complex queries.

What are the various types of queries?

- The types of queries are :
- Normal Queries
- Sub Queries
- Co-related queries
- Nested queries
- Compound queries

What is the difference between clustered and a non-clustered index?

- A **clustered index** is a special type of index that reorders the way records in the table are physically stored. Therefore table can have only one clustered index. The leaf nodes of a clustered index contain the data pages.

A **Nonclustered index** is a special type of index in which the logical order of the index does not match the physical stored order of the rows on disk.

What is a Tablespace?

- A database is divided into Logical Storage Unit called tablespace. A tablespace is used to grouped related logical structures together.

Why use materialized view instead of a table?

- Materialized views are basically used to increase query performance since it contains results of a query. They should be used for reporting instead of a table for a faster execution.

What does ROLLBACK do?

- ROLLBACK retracts any of the changes resulting from the SQL statements in the transaction.

Compare and contrast TRUNCATE and DELETE for a table?

- Both the truncate and delete command have the desired outcome of getting rid of all the rows in a table. The difference between the two is that the truncate command is a DDL operation and just moves the high water mark and produces a now rollback. The delete command, on the other hand, is a DML operation, which will produce a rollback and thus take longer to complete.

what is null value?

- Null Value is neither zero nor it is a blank space. It is some unknown value which occupies 4 bytes of space of memory in SQL.

Define transaction?

- A transaction is a sequence of SQL statements that Oracle Database treats as a single unit.

what is the difference between sql&oracle?

- SQL is Stuctured Query Language.Oracle is a Database.SQL is used to write queries against Oracle DB.

What are different Oracle database objects?

- TABLES
- VIEWS
- INDEXES
- SYNONYMS
- SEQUENCES
- TABLESPACES

What is hash cluster?

- A row is stored in a hash cluster based on the result of applying a hash function to the row's cluster key value. All rows with the same hash key value are stored together on disk.

What is a User_exit?

- Calls the user exit named in the `user_exit_string`. Invokes a 3GL program by name which has been properly linked into your current oracle forms executable.

What is schema?

- A schema is collection of database objects of a user.

What are Roles?

- Roles are named groups of related privileges that are granted to users or other roles.

What are the dictionary tables used to monitor a database spaces ?

- DBA_FREE_SPACE
- DBA_SEGMENTS
- DBA_DATA_FILES

What is a SNAPSHOT?

- Snapshots are read-only copies of a master table located on a remote node which is periodically refreshed to reflect changes made to the master table.

What is a database instance?

- A database instance is a set of memory structure and background processes that access a set of database files. The processes can be shared by all of the users.

What are parameters?

- Parameters provide a simple mechanism for defining and setting the values of inputs that are required by a form at startup. Form parameters are variables of type char, number, date that you define at design time.

What are the different file extensions that are created by oracle reports?

- Rep file and Rdf file.

What are clusters?

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What is difference between SUBSTR and INSTR?

- **INSTR** function search string for sub-string and returns an integer indicating the position of the character in string that is the first character of this occurrence. **SUBSTR** function return a portion of string, beginning at character position, substring_length characters long. **SUBSTR** calculates lengths using characters as defined by the input character set.

Define a view?

- A view is a virtual table which is based on the one or more physical tables and views.

What is the difference between a view and a synonym?

- Synonym is just a second name of table used for multiple link of database. View can be created with many tables, and with virtual columns and with conditions. But synonym can be on view.

What is the usage of SAVEPOINTS?

- **SAVEPOINTS** are used to subdivide a transaction into smaller parts. It enables rolling back part of a transaction. Maximum of five save points are allowed.

What are ORACLE PRECOMPILERS?

- A precompiler is a tool that allows programmers to embed SQL statements in high-level source programs like C, C++, COBOL, etc. The precompiler accepts the source program as input, translates the embedded SQL statements into standard Oracle runtime library calls, and generates a modified source program that one can compile, link, and execute in the usual way.

When do you use WHERE clause and when do you use HAVING clause?

- The WHERE condition lets you restrict the rows selected to those that satisfy one or more conditions. Use the HAVING clause to restrict the groups of returned rows to those groups for which the specified condition is TRUE.

What are the differences between stored procedures and triggers?

- A stored procedures are compiled collection of programs or SQL statements that live in the database. A stored procedure can access and modify data present in many tables. Also a stored procedure is not associated with any particular database object. But triggers are event-driven special procedures which are attached to a specific database object.

What must be installed with ODBC on the client in order for it to work with Oracle?

- **SQLNET and PROTOCOL (for example: TCPIP adapter) layers of the transport programs.**

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what is trigger?

- Triggers are special kind of stored procedures that get executed automatically when an INSERT, UPDATE or DELETE operation takes place on a table.

Explain the difference between a data block, an extent and a segment?

- A data block is the smallest unit of logical storage for a database object. As objects grow they take chunks of additional storage that are composed of contiguous data blocks. These groupings of contiguous data blocks are called extents. All the extents that an object takes when grouped together are considered the segment of the database object.

What is bind reference and how can it be created?

- Bind reference are used to replace the single value in sql, pl/sql statements a bind reference can be created using a (:) before a column or a parameter name.

How many LONG columns are allowed in a table? Is it possible to use LONG columns in WHERE clause or ORDER BY?

- Only one LONG column is allowed. It is not possible to use LONG column in WHERE or ORDER BY clause.

What are various types of joins?

- Equi joins
- Cartesian joins
- Self join
- Outer join

**What is the maximum number of triggers,
can apply to a single table?**

➤ 12 triggers

What command would you use to create a backup control file?

- Alter database backup control file to trace

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What are the different index configurations a table can have?

- A table can have one of the following index configurations
- No indexes
- A clustered index
- A clustered index and many nonclustered indexes
- A nonclustered index
- Many nonclustered indexes.

What is difference between UNIQUE constraint and PRIMARY KEY constraint?

- A column defined as UNIQUE can contain Nulls while a column defined as PRIMARY KEY can't contain Nulls. A table can have only one primary keys.

What is BCP? When does it used?

- BulkCopy is a tool used to copy huge amount of data from tables and views. BCP does not copy the structures same as source to destination.

How to know which index a table is using?

- `SELECT table_name,index_name FROM user_constraints.`

What is SYSTEM tablespace and when is it created?

- Every Oracle database contains a tablespace named SYSTEM, which is automatically created when the database is created. The SYSTEM tablespace always contains the data dictionary tables for the entire database.

**Which date function returns
number value? Which date
function returns number value?**

➤ months_between

what is integrity constraints?

- Integrity constraints are used to ensure accuracy and consistency of data in a relational database.

What is the difference between Explicit and Implicit Cursors?

- An Implicit cursor is one created "automatically" for you by Oracle when you execute a query. It is simpler to code
 - An Explicit cursor is one you create yourself. It takes more code, but gives more control - for example, you can just open-fetch-close if you only want the first record and don't care if there are others
- DBA_DATA_FILES.

what are primary keys?

- Primary key are used to uniquely identify each row of the table. A table can have only one primary key.

What are the components of physical database structure of Oracle database?

- Oracle database is comprised of three types of files. One or more data files, two or more redo log files, and one or more control files.

What is DECODE function used for?

- DECODE is used to decode a CHAR or VARCHAR2 or NUMBER into any of several different character strings or numbers based on value. That is DECODE does a value-by-value substitution.

What is the default return value of a function?

- The default return value from a function is int. In other words, unless explicitly specified the default return value by compiler would be integer value from function.

What is the difference between oracle,sql and sql server?

- Oracle is based on RDBMS.
- SQL is Structured Query Language.
- SQL Server is another tool for RDBMS provided by MicroSoft.

How you will avoid your query from using indexes?

- By changing the order of the columns that are used in the index, in the Where condition, or by concatenating the columns with some constant values.

What is a cluster key?

- The related columns of the tables are called the cluster key. The cluster key is indexed using a cluster index and its value is stored only once for multiple tables in the cluster.

What is SGA?

- The System Global Area in an Oracle database is the area in memory to facilitate the transfer of information between users. It holds the most recently requested structural information between users. It holds the most recently requested structural information about the database. The structure is database buffers, dictionary cache, redo log buffer and shared pool area.

What is a data segment?

- Data segment are the physical areas within a database block in which the data associated with tables and clusters are stored.

What is ROWID?

- ROWID is a pseudo column attached to each row of a table. It is 18 characters long, blockno, row number are the components of ROWID.

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