

Index

Page No.: 38

Date:

youva

Q1) Write Details of All the Empls.

Ans.
select *
from Emp;

Q2) Write EName and salary of all the Empls.

Ans.
select EName, sal
from Emp;

Q3) Write Details of the Empls who are getting sal as 3000

Ans.
select *
from Emp
where sal = 3000;

*> Index \Rightarrow columns

\Downarrow
Index Key

Default

Index

Binary Values

BTREE Index

BITMAP Index

Bits

ii select *
From Emp
Where sal = 3000;

Index (BTREE)

sal

→ 5000
→ 2000
→ 3000
→ 2500
→ 4000
→ 3000
→ 1500
→ 1000

Linear
search

*> Tree Type Structure.

left Pointer

value

Right Pointer

Index Node /
Non LEAF Nodes

3000

1

sal = 3000

< =, >

2000

2

4000

3

1000

RowId

2000 *

3000 *, *

4000 *

1500 *

2500 *

5000 *

Data Nodes /
Leaf Nodes

Leaf Nodes

* Indexes

- i) An Index is a Database structure that can be used to Improve the Performance of SQL Queries or Statements.
- ii) Index Created on columns that columns is known as Index Key.
- iii) Indexes Can be created on one or more columns in a Table and they can be used to Retrieve the data from the Database more quickly.

Syntax:->

Create Index Index Name
on Table Name (col Name);

Note:->

- i) Create Index after inserting the Data into a Table.
- ii) Create Index on the column that are mostly used in Queries.

- * To check Oracle is using Table Scan or Index Scan.
-> set Auto Trace on Explain;

- * To Drop the Index

syntax:->

Drop Index Index Name;

Eg:-> Drop Index I1;

oracle SQL

2) SQL > Create Index I1
on Emp (sal);

Index created.

2) SQL > Set AutoTrace on Explain;

3) SQL > select *
From Emp
Where sal = 3000;

4) SQL > select *
From Emp
Where sal < 3000;

5) SQL > select *
From Emp
Where DeptNo = 10;

6) SQL > Drop Index I1;

Index dropped.