

Index With Data

8	
EMPNO	ROWID
7934	I9AAN
7902	I9AAJ
7900	I9AAH
7876	I9AAM
7844	I9AAG
7839	I9AAA
7788	I9AAL
7782	I9AAC
7698	I9AAB
7654	I9AAE
7566	I9AAD
7521	I9AAI
7499	I9AAF
7369	I9AAK

Physical Table With Data

ROWID	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
I9AAA	7839	KING	PRESIDENT		17-NOV-81	5000		10
I9AAB	7698	BLAKE	MANAGER	7839	01-MAY-81	2850		30
I9AAC	7782	CLARK	MANAGER	7839	09-JUN-81	2450		10
I9AAD	7566	JONES	MANAGER	7839	02-APR-81	2975		20
I9AAE	7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30
I9AAF	7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	30
I9AAG	7844	TURNER	SALESMAN	7698	08-SEP-81	1500	0	30
I9AAH	7900	JAMES	CLERK	7698	03-DEC-81	950		30
I9AAI	7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30
I9AAJ	7902	FORD	ANALYST	7566	03-DEC-81	3000		20
I9AAK	7369	SMITH	CLERK	7902	17-DEC-80	800		20
I9AAL	7788	SCOTT	ANALYST	7566	09-DEC-82	3000		20
I9AAM	7876	ADAMS	CLERK	7788	12-JAN-83	1100		20
I9AAN	7934	MILLER	CLERK	7782	23-JAN-82	1300		10

Diverts The Query For Data Search onto The Index Directly As Index is Available And Query's WHERE Clause is Using The Column Having INDEX

Oracle Query Optimizer

SQL> SELECT Empno, Ename Job, Deptno
FROM Emp
WHERE Empno = 7900;

Result Buffer

EMPNO	ENAME	JOB	DEPTNO
7900	JAMES	CLERK	30

Total Record Size : 8 Bytes
Assumption
1 Byte = 1 Sec
Total Scan Time of 1 Record
8 Seconds
Number of Records Scanned
3 Records
Total Scan OR Search Time
 $3 * 8 = 24$ Seconds

UNIQUE SCAN