

Exp- 10 Indexing

Indexing in a database is a technique used to optimize the speed of data retrieval operations on a database table. An index is a data structure that provides a quick lookup of rows in a table based on the values in one or more columns. By creating an index on one or more columns, the database management system (DBMS) can locate and retrieve the rows more efficiently, reducing the need for a full-table scan.

SQL Code

```
-- Experiment No 10 Indexing
```

```
-- TY B 10
```

```
create table test(
```

```
    first_name varchar(50),
```

```
    last_name varchar(50),
```

```
    company_name varchar(50),
```

```
    address varchar(50),
```

```
    city varchar(50)
```

```
);
```

```
create index index1 on test(first_name);
```

```
explain analyze select * from test where first_name = 'Bok';
```

```
create index emp_index on test(first_name);
```

```
explain analyze select * from test where first_name = 'Bok';
```

```
create index emp_hash_index on test using hash(first_name);
```

```
explain analyze select * from test where first_name = 'Bok';
```

```
select * from information_schema.tables where table_name like '%index%';
```

```
select * from pg_catalog.pg_statio_user_indexes;
```

```
select * from pg_catalog.pg_stat_user_indexes;
```

```
select ctid, * from test;
```