Show Indexes

The SQL Show Index Statement

The **SHOW INDEX** is the basic SQL statement to retrieve the information about the indexes that have been defined on a table. However, the SHOW INDEX statement only works on MySQL RDBMS and is not a valid statement in the SQL Server.

To list the indexes created on a table in SQL Server, a system stored procedure **sp_helpindex** is used.

The result-set obtained from querying the SHOW INDEX statement on a MySQL table contains the index information.

Syntax

Following is the syntax of the **SHOW INDEX** statement in MySQL

```
SHOW INDEX FROM table_name;
```

Example

Following example demonstrates the working of SHOW INDEX statement in MySQL. First, create a table with the name CUSTOMERS in the MySQL database using the CREATE query below:

```
CREATE TABLE CUSTOMERS (
   ID INT NOT NULL,
   NAME VARCHAR (20) NOT NULL,
   AGE INT NOT NULL,
   ADDRESS CHAR (25),
   SALARY DECIMAL (20, 2),
   PRIMARY KEY (ID)
);
```

Let us now insert some values into the above created table using the following query:

```
INSERT INTO CUSTOMERS
VALUES
   (1, 'Ramesh', '32', 'Ahmedabad', 2000),
   (2, 'Khilan', '25', 'Delhi', 1500),
   (3, 'Kaushik', '23', 'Kota', 2000),
   (4, 'Chaitali', '25', 'Mumbai', 6500),
   (5, 'Hardik', '27', 'Bhopal', 8500),
   (6, 'Komal', '22', 'Hyderabad', 9000),
   (7, 'Muffy', '24', 'Indore', 5500);
```

Once the data is inserted, create an index for the column **NAME** in the CUSTOMERS table using the following query:

```
CREATE INDEX INDEX_NAME
ON CUSTOMERS
() (NAME);
```

Now, you can list all the indexes that are defined on the CUSTOMERS table using the following query:

```
SHOW INDEX
FROM CUSTOMERS;
```

Output

On executing the above query, the output is displayed as follows:

Table	Non_unique	Key_name	Seq_in_index	Column_name
customers	0	PRIMARY	1	ID
customers	1	index_name	1	NAME

Showing Indexes in SQL Server

In SQL server, the system stored procedure **sp_helpindex** is used to retrieve the information about the indexes that have been defined on a table. It returns the result as a table that contains detailed information about each index, including the name, type, and columns.

Syntax

Following is the basic syntax to list indexes defined on a table in SQL Server:

```
sp_helpindex
[ @objname = 'name' ];
```

Here, **[@objname =] 'name'** specifies the name of the table for which the index information is being retrieved. The index information includes:

- **index_name** − The names of the columns that are included in the index.
- **index_description** − A brief description of the index, such as the type of index (like clustered or non-clustered).
- **index_keys** − The keys that are included in the index.

Example

```
CREATE INDEX INDEX_NAME
ON CUSTOMERS(NAME);
```

Now, let us list all the indexes that are created on the CUSTOMERS table using the system stored procedure **sp_helpindex** as shown below:

```
EXEC sys.sp_helpindex @objname = N'CUSTOMERS';
```

Output

On executing the above query, the output is displayed as follows:

index_name	index_description	index_keys
INDEX_NAME	nonclustered located on PRIMARY	NAME
PK__CUSTOMER__3214EC27755869D9	clustered, unique, primary key located on PRIMARY	ID