

Department of Computer Science and Engineering
Anna University, Chennai.
CS6106 – Database Management Systems
Week 2(March 01, 2021)

Create table

Syntax:

```
CREATE TABLE table_name
(
column_name1 data_type(size) constraint_name,
column_name2 data_type(size) constraint_name,
column_name3 data_type(size) constraint_name,
....
);
```

Inserting Records:

Syntax:

```
INSERT INTO table_name VALUES (value1,value2,value3,...);
Insert into table_name VALUES (&value1,&value2,&value3,...);
```

Deleting Records:

Syntax:

```
DELETE FROM table_name
WHERE some_column=some_value;
```

Modification of Records:

i. Altering Records:

Syntax:

- ALTER TABLE *table_name*
ADD *column_name datatype*
- ALTER TABLE *table_name*
DROP COLUMN *column_name*

ii.. Updating Records:

Syntax:

```
UPDATE table_name
SET column1=value1,column2=value2,...
WHERE some_column=some_value;
```

Viewing Records:

Syntax:

- SELECT TOP *number|percent column_name(s)*
FROM *table_name*;
- SELECT *column_name(s)*
FROM *table_name*
WHERE ROWNUM <= *number*;
- SELECT *column_name(s)*
FROM *table_name*
WHERE *column_name* **LIKE** *pattern*;

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- SELECT *column_name(s)*
FROM *table_name*
WHERE *column_name* **IN** (*value1,value2,...*);
- SELECT *column_name(s)*
FROM *table_name*
WHERE *column_name* **BETWEEN** *value1* AND *value2*;
- SELECT *column_name* **AS** *alias_name*
FROM *table_name*;

Constraints:

- **NOT NULL** - Indicates that a column cannot store NULL value
- **UNIQUE** - Ensures that each row for a column must have a unique value
- **PRIMARY KEY** - A combination of a NOT NULL and UNIQUE. Ensures that a column (or combination of two or more columns) have a unique identity which helps to find a particular record in a table more easily and quickly
- **FOREIGN KEY** - Ensure the referential integrity of the data in one table to match values in another table
- **CHECK** - Ensures that the value in a column meets a specific condition
- **DEFAULT** - Specifies a default value when specified none for this column

Exercises

1. Write a query to create a table employee with empno, ename, designation, and salary.
2. Write a query to display the column name and datatype of the table employee.
3. i) Write a query to create a table from an existing table with all the fields.
ii) Write a query to create a table from an existing table with selected fields.
iii) Write a query to create a new table from an existing table without any record.
4. i) Write a query to Alter the column EMPNO NUMBER(4) TO EMPNO NUMBER(6).
ii) Write a query to Alter the table employee with multiple columns (EMPNO, ENAME.)
5. i) Write a query to add a new column in to employee
ii) Write a query to add multiple columns in to employee
6. i) Write a query to drop a column from an existing table employee
ii) Write a query to drop multiple columns from employee
7. Write a query to rename table emp to employee.
8. Write a query to create primary constraints with column level
9. Write a query to create foreign key constraints with column level
10. Write a query to create Check constraints with column level
11. Write a query to create unique constraints with column level
12. Write a query to create Not Null constraints with column level
13. Write a query to create Null constraints with column level