

Add an `AUTO_INCREMENT` column as `PRIMARY KEY` in MySQL table

Do you like to add a new column like an id, that auto increments itself for every row that is inserted to the table? In this MySQL Tutorial, we shall create a new column that is `PRIMARY KEY` with `AUTO_INCREMENT` column modifier.

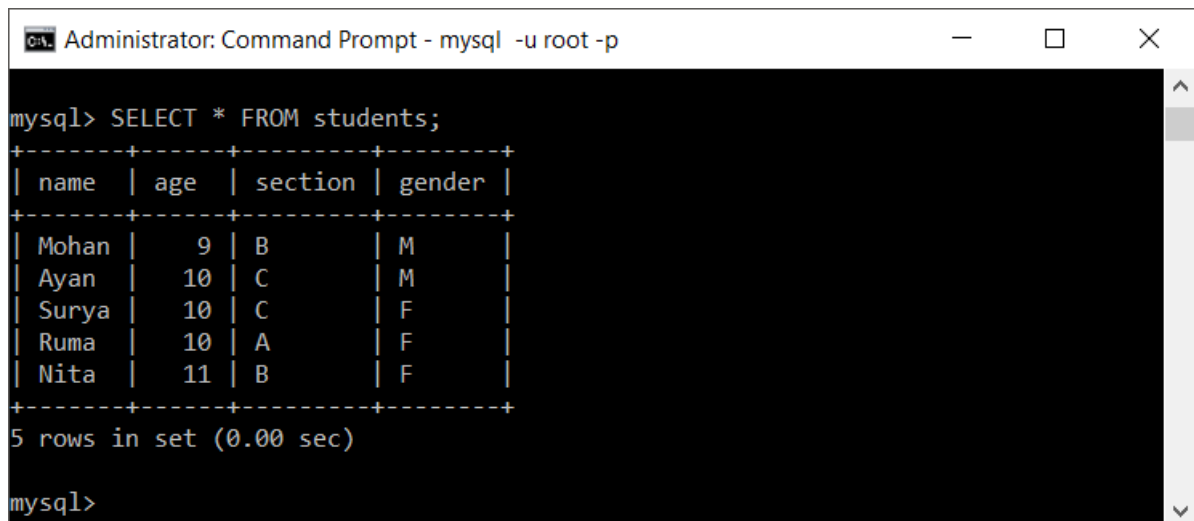
To add a new column to MySQL, following is the syntax of the SQL Query:

```
mysql> ALTER TABLE
table_name

mysql> ALTER TABLE table_name
ADD [COLUMN] new_column_name AUTO_INCREMENT PRIMARY KEY;
```

Example to add new column that auto increments and act as `PRIMARY KEY`

For this example, let us consider the following table, `students`.



```
Administrator: Command Prompt - mysql -u root -p

mysql> SELECT * FROM students;
+-----+-----+-----+-----+
| name  | age  | section | gender |
+-----+-----+-----+-----+
| Mohan | 9    | B       | M      |
| Ayan  | 10   | C       | M      |
| Surya | 10   | C       | F      |
| Ruma  | 10   | A       | F      |
| Nita  | 11   | B       | F      |
+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql>
```

Run the following SQL Query to add a new column named `id` that acts as `PRIMARY KEY` and auto increments for each insert.

```
ALTER TABLE students
ADD id INT

ALTER TABLE students
ADD id INT AUTO_INCREMENT PRIMARY KEY;
```

```
Administrator: Command Prompt - mysql -u root -p
mysql> ALTER TABLE students
-> ADD id INT AUTO_INCREMENT PRIMARY KEY;
Query OK, 0 rows affected (0.28 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql>
```

The column `id` is added successfully. Lets see the contents of the modified table.

```
Administrator: Command Prompt - mysql -u root -p
mysql> SELECT * FROM students;
+-----+-----+-----+-----+-----+
| name | age | section | gender | id |
+-----+-----+-----+-----+-----+
| Mohan | 9 | B | M | 1 |
| Ayan | 10 | C | M | 2 |
| Surya | 10 | C | F | 3 |
| Ruma | 10 | A | F | 4 |
| Nita | 11 | B | F | 5 |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
mysql>
```

Let us see the updated table schema.

```
Administrator: Command Prompt - mysql -u root -p
mysql> DESCRIBE students;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| name | varchar(30) | YES | | NULL | |
| age | int(11) | YES | | NULL | |
| section | char(1) | YES | | NULL | |
| gender | char(1) | YES | | NULL | |
| id | int(11) | NO | PRI | NULL | auto_increment |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
mysql>
```

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