

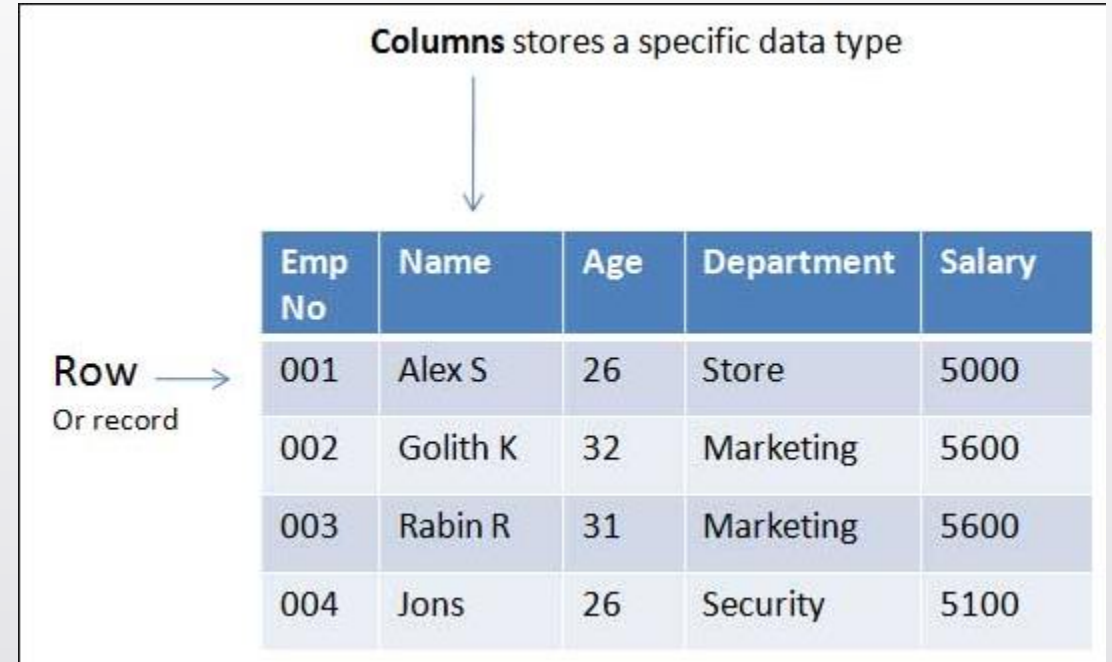


What is a Table, Column and ROW?

What is a Table..

- Relational database system contains one or more objects called tables.
- The data or information for the database are stored in these tables.
- Tables are uniquely identified by their names
- MySQL has no limit on the number of tables.
- The underlying file system may have a limit on the number of files that represent tables.
- Individual storage engines may impose engine-specific constraints.
- InnoDB permits upto 4 billion Tables.

Columns stores a specific data type



Emp No	Name	Age	Department	Salary
001	Alex S	26	Store	5000
002	Golith K	32	Marketing	5600
003	Rabin R	31	Marketing	5600
004	Jons	26	Security	5100

What is a Column...

- Column is a set of data values, all of a single type, in a table.
- Columns define the data in a table.
- A column may contain text values, numbers, or even pointers to files in the operating system.
- Column name is unique in table.
- Maximum no of Columns in MySQL is 4096.
- Table need at least one column.
- Field = Column.
- Field is the intersection of a row and a column.
- `mysql> SHOW COLUMNS FROM tablename from database;`

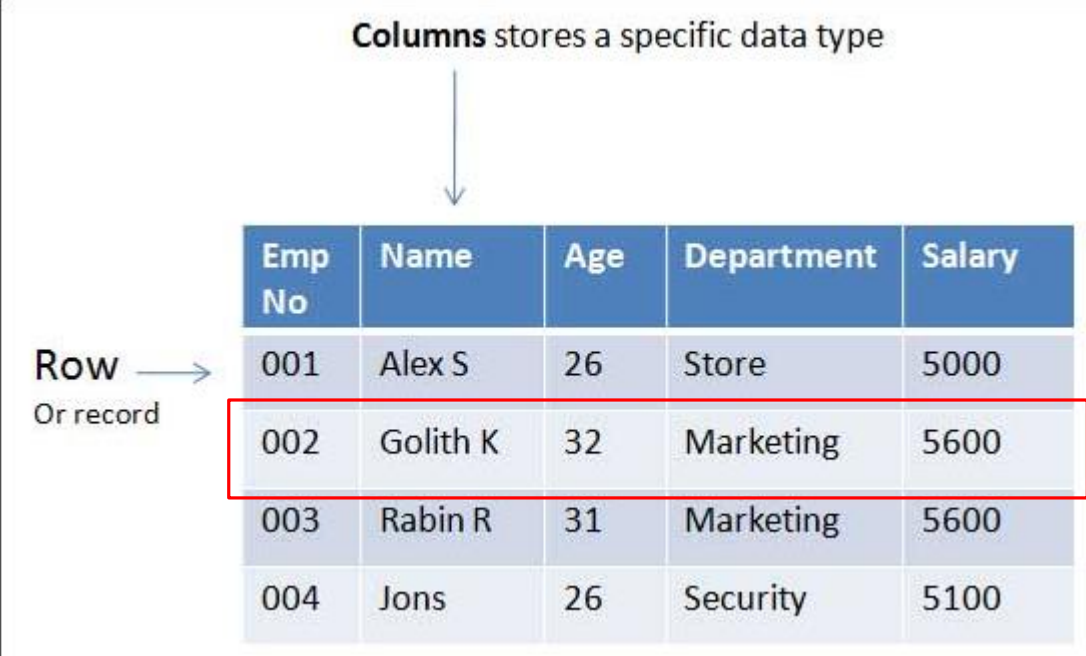
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What is a ROW...

- In database terms, a row is a collection of fields that make up a record.
- A row is also called a record.
- Each row represents a unique record.
- A table can contain zero or more rows. When there are zero, it said to be empty table.
- The number of rows in the table is limited only by the storage capacity of the server.
- MySQL table has a maximum row size limit of 65,535 bytes
- In InnoDB, with a limit on table size of 64 terabytes and a MySQL row-size limit of 65,535 there can be 1,073,741,824 rows.
- That would be minimum number of records utilizing maximum row-size limit. However, more records can be added if the row size is smaller .

Columns stores a specific data type



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Row →
Or record