

Make a research on MySQL storage engines with a brief explanation for each type

1. InnoDB is a transaction-safe (ACID compliant) storage engine for MySQL that has commit, rollback, and crash-recovery capabilities to protect user data.
2. MyISAM: These tables have a small footprint. Table-level locking limits the performance in read/write workloads, so it is often used in read-only or read-mostly workloads in Web and data warehousing configurations.
3. Memory: Stores all data in RAM, for fast access in environments that require quick lookups of non-critical data.
4. CSV: Its tables are really text files with comma-separated values.
5. Archive: These compact, unindexed tables are intended for storing and retrieving large amounts of seldom-referenced historical, archived, or security audit information.
6. Blackhole: The Blackhole storage engine accepts but does not store data, similar to the Unix /dev/null device
7. NDB (also known as NDBCLUSTER): This clustered database engine is particularly suited for applications that require the highest possible degree of uptime and availability.
8. Merge: Enables a MySQL DBA or developer to logically group a series of identical MyISAM tables and reference them as one object.
9. Federated: Offers the ability to link separate MySQL servers to create one logical database from many physical servers.

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Object Info

Session

Schema: MARKET

1 CREATE DATABASE markets;

2 use markets;

3 create table customers(

4 id int (5) not null,

5 customerName varchar(50),

6 country varchar(50) default 'egypt',

7 primary key (id)

8);

9

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

100%

13:2

Action Output

	Time	Action	Response	Duration / Fetch Time
1	20:20:01	CREATE DATABASE markets	1 row(s) affected	0.0024 sec
2	20:20:30	CREATE DATABASE markets	Error Code: 1007. Can't create database 'markets'; da...	0.00075 sec
3	20:20:52	CREATE DATABASE markets	Error Code: 1007. Can't create database 'markets'; da...	0.00046 sec

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Object Info

Session

Columns:
customerNumber int PK
customerName varchar(50)
contactLastName varchar(50)
contactFirstName varchar(50)
phone varchar(50)
addressLine1 varchar(50)
addressLine2 varchar(50)

1 use markets;

2 create table products(

3 productName varchar(70) not null,

4 productLine varchar(50) not null ,

5 productNumber int(5) ,

6 primary key (productNumber),

7 foreign key (customerName)references customers (customerName)

8);

9

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1:9

Action Output

	Time	Action	Response	Duration / Fetch Time
10	20:45:39	CREATE DATABASE markets	Error Code: 1007. Can't create database 'markets'; da...	0.00049 sec
11	20:53:53	use markets	0 row(s) affected	0.00083 sec
12	20:53:53	create table customers(id int (5) not null, customerName varchar(50), countr...	0 row(s) affected, 1 warning(s): 1681 integer display...	0.052 sec
13	21:02:40	use markets	0 row(s) affected	0.00022 sec
14	21:02:40	create table products(productName varchar(70) not null, productLine varchar(...	Error Code: 1072. Key column 'customerName' doesn't ...	0.0020 sec

Query interrupted

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Session

Columns:

customerNumber

int PK

customerName

varchar(50)

contactLastName

varchar(50)

contactFirstName

varchar(50)

phone

varchar(50)

addressLine1

varchar(50)

addressLine2

varchar(50)

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1

use markets;

2

create table orders (

3

idOrder int(5) not null,

4

phone varchar(50) not null ,

5

customerName varchar(50) ,

6

primary key (idOrder),

7

foreign key (customerName) references customers (customerName)

8

);

9

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Columns:

customerNumber

int PK

customerName

varchar(50)

contactLastName

varchar(50)

contactFirstName

varchar(50)

phone

varchar(50)

addressLine1

varchar(50)

addressLine2

varchar(50)

100%

23:6

Action Output

	Time	Action	Response	Duration / Fetch Time
▲ 12	20:53:53	create table customers(id int (5) not null, customerName varchar(50), countr...	0 row(s) affected, 1 warning(s): 1681 Integer display...	0.052 sec
▲ 13	21:02:40	use markets	0 row(s) affected	0.00022 sec
▲ 14	21:02:40	create table products(productName varchar(70) not null, productLine varchar(...	Error Code: 1072. Key column 'customerName' doesn't...	0.0020 sec
▲ 15	21:14:45	use markets	0 row(s) affected	0.00038 sec
▲ 16	21:14:45	create table orders (idOrder int(5) not null, phone varchar(50) not null , cust...	Error Code: 1822. Failed to add the foreign key constr...	0.0028 sec

Query interrupted

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