

010-002 Certified MySQL Associate (CMA)

1

Does MySQL 4 support ACID transactions?

- A. Yes, in the standard MySQL 4.0 distribution
- B. Only if you use MySQL-Max
- C. Not with MyISAM; you need to use another storage engine to have ACID transactions
- D. No, since transactions are hardly ever needed

2

In which of the following cases should you choose to use the `MEMORY` storage engine?

- A. You need to store large amounts of data
- B. You need to use transactions
- C. You need fast access to data, which you can afford to lose in case of power failure.
- D. You need to store temporary data during one logical operation.

3

When executing

```
DELETE FROM articles LIMIT 10
```

Which rows will be deleted?

- A. All the rows in the table.
- B. The first 10 rows from the table sorted by primary key
- C. The last 10 rows from the table sorted by primary key
- D. The first 10 rows that the server happens to find in the table
- E. Nothing; this is not a legal statement

4

You have started the `mysql` command-line client program and selected a default database. You need to run a batch of SQL commands stored in a file. What is the correct command for doing so, and where should the file be located?

- A. `SCRIPT <filename on server host>`
- B. `SCRIPT <filename on client host>`
- C. `BATCH <filename on server host>`
- D. `BATCH <filename on client host>`
- E. `SOURCE <filename on server host>`
- F. `SOURCE <filename on client host>`

5

In a LAMP website,

- A. Linux, Apache, MySQL and PHP/Perl can run on the same physical computer
- B. Linux, Apache, MySQL and PHP/Perl must run on the same physical computer
- C. One can have several computers running Apache, being served by one and the same computer running MySQL Server for database services
- D. One can have several computers running MySQL for database services, replicating the same database

6

Assume that the default database contains the tables `petowners` and `dogs`. The tables are related through the `petownerID` field in both tables.

You need to find all dogs and their owners, as well as any dogs without registered owners. Which word is missing in the following query?

```
SELECT dogName, petownerName
FROM dogs LEFT JOIN petowners _____ (petownerID)
```

Answer:

7

John is creating a table to store membership information for his bridge club. The table `members` is defined as:

```
mysql> DESCRIBE members;
```

Field	Type	Null	Key	Default	Extra
<code>memberID</code>	<code>int(11)</code>	YES		NULL	
<code>firstName</code>	<code>varchar(20)</code>	YES		NULL	

John now issues the command

```
mysql> ALTER TABLE members ADD lastName CHAR(20);
```

What happens next?

- A. Nothing. You cannot add a `CHAR` column, once a `VARCHAR` column is present
- B. MySQL first changes the column to `VARCHAR(20)`, then adds it to the table
- C. The new column is added exactly as it is defined

8

What is the main reason to specify column names in your insert statement, i.e. use

```
INSERT INTO friends (name) VALUES ("Joe")
```

instead of

```
INSERT INTO friends VALUES ("Joe")
```

in an application?

- A. The first statement will be much faster
- B. The first statement will allow you to add columns to the table without modifying your application
- C. MySQL will produce more understandable error messages in case of an error.

9

The `mysqldump` client program can be used to ...

- A. see a list of all current sessions on a server
- B. examine "core dumps" created by the server in case of a server crash
- C. save the definitions and data of one or more tables in a file suitable for copying onto another MySQL server.
- D. see a list of all current status variables and their values
- E. delete tables in a database

10

Why would you want to consider signing up for a support contract by MySQL AB?

- A. I am guaranteed a response from a MySQL developer, most often within one business day or less
- B. If I have a support contract, I am free to sell closed-source copies of programs that include the MySQL server
- C. My problems are escalated all the way to the CTO if necessary
- D. Support contracts include advice on such issues as best practices, performance bottlenecks, and backup starting with the entry-level support option

11

Which of the following characters can not be used in a database name, after the first character?

- A. " " (space)
- B. newline
- C. "." (period)
- D. "_" (underscore)
- E. "@"

12

You have created the following table:

```
mysql> DESCRIBE numbers;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| number | int(10) unsigned |      | PRI | 0        |       |
+-----+-----+-----+-----+-----+-----+
```

Which of the following statements will succeed in updating this table?

- A. `REPLACE INTO TABLE numbers SET number=number+1`
- B. `REPLACE INTO numbers SET number=number+1`
- C. `REPLACE INTO numbers VALUES (1,2,3)`
- D. `REPLACE INTO numbers VALUES (1),(2),(3)`
- E. `REPLACE INTO numbers (number) VALUES (1)`
- F. `REPLACE INTO numbers (numbers) VALUES (number+1)`

You have the following 2 tables:

```
mysql> DESCRIBE articles;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| id    | int(10) unsigned |      | PRI | NULL    | auto_increment |
| title | char(40)        | YES  |     | NULL    |                |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.02 sec)
```

```
mysql> DESCRIBE keywords;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| article_id | int(10) unsigned |      | PRI | 0       |      |
| keyword    | char(20)        |      | PRI |         |      |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM articles;
+----+-----+
| id | title                                     |
+----+-----+
| 1  | An Introduction to MySQL                 |
| 2  | Migrating from Oracle to MySQL          |
+----+-----+
2 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM keywords;
+-----+-----+
| article_id | keyword |
+-----+-----+
|          1 | MySQL   |
|          1 | Tutorial |
|          3 | Linux   |
|          3 | MySQL   |
+-----+-----+
4 rows in set (0.00 sec)
```

The tables are related through `id` in `articles` and `article_id` in `keywords`.
 What will be the result of the following query?

```
SELECT title, keyword FROM articles LEFT JOIN keywords ON id=article_id
```

- A. the empty set
- B. ("An Introduction to MySQL","MySQL"), ("An Introduction to MySQL","Tutorial")
- C. ("An Introduction to MySQL","MySQL"), ("An Introduction to MySQL","Tutorial"),("Migrating from Oracle to MySQL",NULL)
- D. ("An Introduction to MySQL","MySQL"), ("An Introduction to MySQL","Tutorial"),(NULL,"Linux"),(NULL,"MySQL")
- E. ("An Introduction to MySQL","MySQL"), ("An Introduction to MySQL","Tutorial"), ("Migrating from Oracle to MySQL",NULL),(NULL,"Linux"),(NULL,"MySQL")

With which statement do you select or change your current database? (Write one keyword)

Answer:

15

Given the table `countries` with the following structure:

Field	Type	Null	Key	Default	Extra
<code>country</code>	<code>char(30)</code>	YES		NULL	
<code>continent</code>	<code>char(30)</code>	YES		NULL	
<code>population</code>	<code>int(11)</code>	YES		NULL	

Which of the following queries will select those countries which are found on continents where the average population of countries on that continent is at least 15 000 000?

A. This cannot be done in a single query

B.

```
SELECT country, continent AS c
FROM countries
WHERE 15000000 <= (
SELECT AVG(population)
FROM countries
WHERE continent = c
GROUP BY continent
)
```

C.

```
SELECT country, continent AS c
FROM countries
WHERE 15000000 <= ANY (
SELECT AVG(population)
FROM countries
GROUP BY continent
)
```

D.

```
SELECT country, continent AS c
FROM countries
WHERE EXISTS (
SELECT AVG(population) AS p
FROM countries
WHERE continent = c
GROUP BY continent
HAVING p >= 15000000
)
```

16

You have a problem with a query that just doesn't work as you want it to.

You check the manual several times, to no avail. Assuming that you do not have a support contract with MySQL AB, where is the next place to go for help?

- A. The general ("mysql") mailing list
- B. The "bugs" mailing list
- C. Write an e-mail to the developers of MySQL

17

Which type of statement may be used to insert new data into a table or replace data already in the table? Write only the first word.

Answer:
