

Q1.

MySQL :: Download MySQL Ins: x +

dev.mysql.com/downloads/windows/installer/8.0.html

MySQL Community Downloads

MySQL Installer

General Availability (GA) Releases Archives

MySQL Installer 8.0.30

Select Operating System:
Microsoft Windows

Looking for previous GA versions?

Windows (x86, 32-bit), MSI Installer (mysql-installer-web-community-8.0.30.0.msi)	8.0.30	5.5M	Download
Windows (x86, 32-bit), MSI Installer (mysql-installer-community-8.0.30.0.msi)	8.0.30	448.3M	Download

MD5: c095cf221e8023fd8391f81eadce65fb | Signature

MD5: c9cbd5d788f45605dae914392a1dfeea | Signature

We suggest that you use the MD5 checksums and GnuPG signatures to verify the integrity of the packages you download.

MySQL Installer

MySQL Installer

MySQL Server 8.0.30

Type and Networking

Server Configuration Type

Choose the correct server configuration type for this MySQL Server installation. This setting will define how much system resources are assigned to the MySQL Server instance.

Config Type: Development Computer

Connectivity

Use the following controls to select how you would like to connect to this server.

☒ TCP/IP Port: 3306 X Protocol Port: 33060

☒ Open Windows Firewall ports for network access

☐ Named Pipe Pipe Name: MYSQL

☐ Shared Memory Memory Name: MYSQL

Advanced Configuration

Select the check box below to get additional configuration pages where you can set advanced and logging options for this server instance.

☐ Show Advanced and Logging Options

MySQL Installer

MySQL. Installer

MySQL Router 8.0.28

MySQL Router Configuration

☐ Bootstrap MySQL Router for use with InnoDB Cluster

This wizard can bootstrap MySQL Router to direct traffic between MySQL applications and InnoDB Cluster. Applications that connect to the router will be automatically directed to an available read/write or read-only member of the cluster.

The bootstrapping process requires a connection to InnoDB Cluster. In order to register the MySQL Router for monitoring, use the current Read/Write instance of the cluster.

Hostname:

Port:

Management User:

Password:

MySQL Router requires specification of a base port (between 80 and 65532). The first port is used for classic read/write connections. The other ports are computed sequentially after the first port. If any port is indicated to be in use, please change the base port.

Classic MySQL protocol connections to InnoDB Cluster:

Read/Write:

Read Only:

X Protocol connections to InnoDB Cluster:

Read/Write:

Read Only:

3 • `show tables;`

4 • `describe columns_priv;`

<

Result Grid | Filter Rows:

Tables_in_mysql
columns_priv
component
db
default_roles
engine_cost
func
general_log
global_grants
gtid_executed
help_category
help_keyword
help_relation
help_topic
innodb_index_s...
innodb_table_s...
password_history
plugin

4 • `describe columns_priv;`

<

Result Grid | Filter Rows: | Export: | Wrap Cell Cor

	Field	Type	Null	Key
►	Host	char(255)	NO	PRI
	Db	char(64)	NO	PRI
	User	char(32)	NO	PRI
	Table_name	char(64)	NO	PRI
	Column_name	char(64)	NO	PRI
	Timestamp	timestamp	NO	
	Column_priv	set('Select','Insert','Update','References')	NO	

5 • `CREATE USER 't109590004'@'localhost' IDENTIFIED BY 'pa$$w0rd';`

Q 2.

Self-describing(資料庫資料儲存的描述)

program-data independence(程式-資料獨立性、在不改變 DBMS 訪問程序情況下，改變資料結構與資料儲存架構)

data abstraction(資料抽象化、隱藏資料詳細內容並向用戶展示資料儲存概念圖)

multiple views(多種檢視圖、針對不同需求或用戶規劃不同的檢視圖)

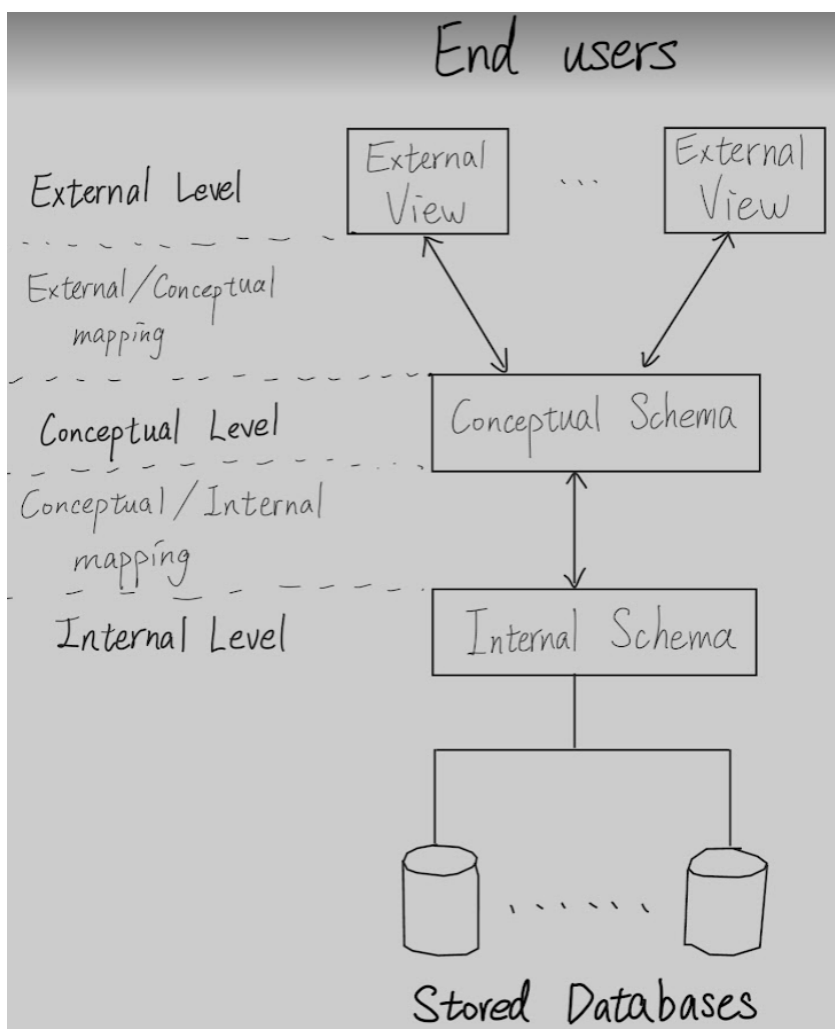
data sharing(資料共享、多位使用者能檢視、更新資料庫)

concurrency control(併發控制、決定交易要求是否被正確執行或終止)

recovery(可還原性、確保每個正確完成的交易紀錄被保留在系統中)

online transaction processing (簡稱 OLTP、處理大量併發交易).

Q 3(a).



Q 3(b).

Logical Data Independence:

能在不須更動 **external schemas** 與相關聯應用程式的情況下，更動 **conceptual schema**.

Physical Data Independence:

能在不須更動 **conceptual schemas** 的情況下，更動 **internal schema**.

Q 4(a).

Data model: 用於描述資料庫架構、提供實現這些抽象類別的方式。

Q 4(b).

Database schema: 對資料庫結構的敘述、資料型態以及資料之間的約束。

Q 5.

Entity 1	Cardinality Ratio	Entity 2
1. Student	1 : 1	StudentID_Card
2. Student	m : n	Advisor
3. ClassRoom	m : n	Wall
4. Student	m : n	CourseSection
5. Course	n : 1	TextBook

- 1 位學生只能有 1 張學生證 1 張學生證只能被 1 位學生擁有
- 1 位學生能有多位指導教授而 1 位指導教授能當多位學生的指導教授
- 1 間教室會有多道牆 1 道牆能屬於多間教室
- 1 位學生能同時在多個 CourseSection 每個 CourseSection 都能有多位學生
- 1 本教科書能被多個課程指定 每個課程只能有 1 本教科書

Q 6.

