

# [DT 2025] Quiz 1 - General concepts, data management, SQL

Duration 10 minutes

Collaborating with other students and using books and notes during the quiz is not permitted.

\* Obbligatoria

\* Questo modulo registrerà il tuo nome, inserire il nome.

Enter your Last Name and First Name \*

I declare that I will not collaborate with other students and I will not use books or notes or other material during the quiz. \*

☐ Yes

☐ No

Which of the following SQL statements is correct and meaningful considering the following tables?

**PRODUCT (PROD\_ID, PROD\_NAME)**  
**SALES (PROD\_ID, YEAR, STORE, QUANTITY)**

(1 punto)

☐ SELECT NAME FROM PRODUCT

☐ None of the above

☐ SELECT YEAR FROM SALES WHERE STORE = 'MyStore'

☐ SELECT PROD\_NAME, STORE FROM PRODUCT, SALES

How is information defined in the context of data? (1 punto)

☐ A collection of random facts

☐ Data that has not been processed

☐ The interpretation of a data item or set of data

Complete the following SQL statement in a DB with the following tables, to retrieve the names of products produced in one of the following years: 2023, 2024

**PRODUCT (PROD\_ID, PROD\_NAME)**  
**SALES (PROD\_ID, YEAR, STORE, QUANTITY)**

```
SELECT P.PROD_NAME  
FROM SALES S, PRODUCT P  
WHERE __1__  
AND __2__  
(2 punti)
```

- ☐ 1) P.PROD\_ID=S.PROD\_ID                      2) YEAR=2023 OR YEAR = 2024
- ☐ 1) P.PROD\_ID=S.PROD\_ID                      2) (YEAR=2023 OR 2024)
- ☐ none of the above
- ☐ 1) P.PROD\_ID=S.PROD\_ID                      2) (YEAR=2023 OR YEAR=2024)

What is a key characteristic of OLTP systems? (1 punto)

- ☐ support of operational activities
- ☐ Complex data aggregation
- ☐ Long-term data storage

According to Moody's laws, which of the following statements is true? (1 punto)

- ☐ very large quantities of data are always going to produce more value
- ☐ The value of information is related to its use
- ☐ The value of information does not change over time

What is metadata? (1 punto)

- ☐ Data about data.
- ☐ Data that is encrypted for security.
- ☐ Data that is used for marketing purposes.

How do you fill in the blank in the following statement to add a column CITY to table SALES (PROD\_ID, YEAR, STORE, QUANTITY) ?

\_\_\_\_\_ **TABLE SALES ADD CITY** (1 punto)

- ☐ ALTER
- ☐ UPDATE
- ☐ INSERT

Which of the following queries is preferable if you want to retrieve the quantity of the product with code 'P1' in the year 2024 and the stores in which it is sold?

**PRODUCT (PROD\_ID, PROD\_NAME)**  
**SALES (PROD\_ID, YEAR, STORE, QUANTITY)**

Options:

- A)  
SELECT \*  
FROM PRODUCT P, SALES S  
WHERE S.PROD\_ID='P1' AND S.YEAR = 2024
- B)  
SELECT STORE, QUANTITY  
FROM SALES  
WHERE PROD\_ID='P1' AND YEAR = 2024
- C)  
SELECT S.STORE, S.QUANTITY  
FROM PRODUCT P, SALES S  
WHERE S.PROD\_ID='P1' AND S.YEAR = 2024 AND  
P.PROD\_ID = S.PROD\_ID (2 punti)

- ☐ All of the above
- ☐ A
- ☐ B
- ☐ C
- ☐ None of the above

Which statement is not true about DBMSs? (1 punto)

- ☐ a DBMS is a software system
- ☐ a DBMS supports concurrent interactions on the database by multiple users
- ☐ a DBMS manages only SQL queries

Why the base of the DIKW (Data Information Knowledge Wisdom) pyramid is larger?  
(1 punto)

- ☐ volume of data
- ☐ needed resources
- ☐ larger infrastructure

In an OLTP system the operations on data are (1 punto)

- ☐ write only
- ☐ read and write
- ☐ read only

What type of data do OLAP systems primarily process? (1 punto)

- ☐ Current data
- ☐ Historical data
- ☐ Real-time data

Which is a foreign key in table SALES?

**SALES (PROD\_ID, YEAR, STORE, QUANTITY)**  
**PRODUCT (PID, PROD\_NAME)**  
(1 punto)

- ☐ none of the above
- ☐ PROD\_ID, YEAR, STORE
- ☐ ID
- ☐ PROD\_ID

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