



UNIVERSITÀ DEGLI STUDI DI MILANO

CONCORSO PUBBLICO, PER ESAMI, PER IL RECLUTAMENTO DI N. 2 UNITÀ DI PERSONALE AFFERENTE ALL'AREA DEI FUNZIONARI - SETTORE TECNICO-INFORMATICO, CON RAPPORTO DI LAVORO SUBORDINATO A TEMPO INDETERMINATO PRESSO L'UNIVERSITÀ DEGLI STUDI DI MILANO - DIREZIONE PERFORMANCE, ASSICURAZIONE QUALITÀ, VALUTAZIONE E POLITICHE DI OPEN SCIENCE - CODICE 22475

La Commissione giudicatrice della selezione, nominata con Determina Direttoriale n. 13115 del 02/08/2024, composta da:

Dott.ssa Marialuisa De Francesco	Presidente
Dott. Andrea Barbagallo	Componente
Dott. Riccardo Furini	Componente
Dott.ssa Chiara Melloni	Segretaria

comunica i quesiti relativi alla prova orale:

BUSTA 1

1. Definizione di Open Data ed eventuali utilizzi.
2. Descrivere il significato e l'utilizzo della clausola SQL "JOIN" e dell'operatore "UNION"
3. Leggere e tradurre

Power BI is a collection of software services, apps, and connectors that work together to turn your unrelated sources of data into coherent, visually immersive, and interactive insights. Your data might be an Excel spreadsheet, or a collection of cloud-based and on-premises hybrid data warehouses. Power BI lets you easily connect to your data sources, visualize and discover what's important, and share that with anyone or everyone you want.

Power BI consists of several elements that all work together, starting with these three basics:

- a. A Windows desktop application called *Power BI Desktop*.
- b. An online software as a service (SaaS) service called the *Power BI service*.
- c. Power BI Mobile apps for Windows, iOS, and Android devices.

[Fonte: Learn Microsoft <https://learn.microsoft.com/en-us/power-bi/fundamentals/power-bi-overview>]

BUSTA 2

1. Definire le 3 fasi di un processo ETL
2. Che cosa si intende per *subquery* in SQL, descrivendo le sue caratteristiche principali e fornendo un esempio pratico di utilizzo all'interno di una query
3. Leggere e tradurre

The concept of open data is not new, but a formalized definition is relatively new. Open data as a phenomenon denotes that governmental data should be available to anyone with a possibility of redistribution in any form without any copyright restriction. One more definition is the Open Definition which can be summarized as "a piece of data is open if anyone is free to use, reuse, and redistribute it - subject only, at most, to the requirement



UNIVERSITÀ DEGLI STUDI DI MILANO

to attribute and/or share-alike. "Other definitions, including the Open Data Institute's "open data is data that anyone can access, use or share," have an accessible short version of the definition but refer to the formal definition. Open data may include non-textual material such as maps, genomes, connectomes, chemical compounds, mathematical and scientific formulae, medical data, and practice, bioscience and biodiversity.

[Fonte: Wikipedia https://en.wikipedia.org/wiki/Open_data]

BUSTA 3

1. Differenze tra Database Operativo (OLTP), Datawarehouse e Datamart.
2. Qual è la differenza tra i comandi SQL "DELETE", "TRUNCATE TABLE", "DROP TABLE"
3. Leggere e tradurre

A data warehouse is a system used for reporting and data analysis and is considered a core component of business intelligence. Data warehouses are central repositories of integrated data from one or more disparate sources. They store current and historical data in one single place that are used for creating reports. This is beneficial for companies as it enables them to interrogate and draw insights from their data and make decisions.

The data stored in the warehouse is uploaded from the operational systems (such as marketing or sales). The data may pass through an operational data store and may require data cleansing for additional operations to ensure data quality before it is used in the data warehouse for reporting.

[Fonte: Wikipedia https://en.wikipedia.org/wiki/Data_warehouse]

Milano, 13 Settembre 2024

La Commissione

Dott.ssa Marialuisa De Francesco Presidente

Dott. Andrea Barbagallo Componente

Dott. Riccardo Furini Componente

Dott.ssa Chiara Melloni Segretaria