ByteWise Fellowship – Week 1

Module: DE Basics [2] Q/A Date: 15-March-2023

Question#1

**Can a database be used as DWH?**

Yes, It is possible to use a DB as a DWH but it would have limited functionalities and would not be able to achieve the full working capacity of a DWH as DWH stores large amount of data compared to a database.   
To conclude, It is possible make DB a DWH but it would not be advantageous although you can add number of DBs together to make a DWH if the DBs have a defined structure or relation.

Question#2

**Major differences between structured and Un-structured data.**

|  |  |
| --- | --- |
| **Structured Data** | **Unstructured Data** |
| Has a specific format, often using a tabular structure (e.g. spreadsheet, database table) | Lacks a specific structure |
| Stored in a structured database system such as SQL | Stored in a variety of formats including documents, social media feeds, and website content |
| Easy to process using automated tools | Requires advanced processing techniques such as machine learning |
| Used for quantitative analysis | Used for qualitative analysis such as sentiment analysis, topic modeling, and trend analysis |
| Smaller in volume | Can be massive in size and difficult to manage |
| Used for business applications such as financial analysis, inventory management, and customer relationship management | Used for a wide range of applications including marketing research, content analysis, and social media monitoring |

Question#3

Key Duties of Data Enginner:

* Design and build pipelines that extract, transform, and load (ETL) data from various sources into data warehouses or data lakes.
* Data engineers are responsible for maintaining data infrastructure, such as databases, data warehouses, and data lakes.
* Responsible for ensuring that data is accurate, reliable, and consistent.
* Responsible for ensuring that data is secure and protected from unauthorized access or breaches.