

--15. Please explain (briefly) the differences between SQL queries used to answer the same questions between
 --AdventureWorksDW2017 & AdventureWorks2017

| AdventureWorks | AdventureWorksDW |
|---|---|
| Database of the normalized approach | Database of the dimensional approach |
| Difficult to understand and slow query processing as compared to AdventureWorksDW | User centric; Faster query processing |
| Database are normalized | Transaction data are partitioned into "facts" & "dimensions", which are the reference information |
| Divides data into entities, which creates several tables in a relational database | Does not involve a relational database every time. Thus, this type of modeling technique is very useful for end-user queries in data warehouse. |
| Data stored following, to a degree, database normalization rules. Tables are grouped together by subject areas that reflect general data categories (e.g., data on customers, products, etc.). | Data stored in fact tables and dimensions. Fact table contains FK key and measure. These keys are PK's from dimension tables. |
| Number of tables involved, it can be difficult for users to join data from different sources into meaningful information and to access the information without a precise understanding of the sources of data and of the data structure of AdventureWorks | Number of tables are less as only specific information is taken from operational systems. |