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| View | CTE | Temp |
| * A View in PostgreSQL is a virtual table that represent the result of query. | * A CTE in PostgreSQL is a temporary result set that you can reference within a Select, Insert, Update or Delete statement. | * A temporary table in SQL server is a special table that cannot be store permanently on the database server. |
| * It doesn’t store data physically like a table but instead stores a query which get executed whenever the view is called. | * CTE help simplify complex query and more particularly useful for recursive queries. | * These table keeps a subset of data and can be reused multiple times in a particular session. |
| * It can stored the query structure (not data) recalculate unless materialized. | * It does not stored data, it is recalculated each time. | * We cannot stored table in the memory. |
| * View can be modify with some terms and conditions. | * CTE cannot modify directly. | * It can be deleted automatically when the current session ends. |
| * Define and stored in the database using create view. | * Define within the query using with. | * Create it explicitly using create temporary table or similar commands. |
| * Reusable cross multiple queries. | * Only reusable within the query where it is define. | * It can be created once and reuse across multiple queries or sessions. |
| * Can improve performance if materialize; otherwise, similar to CTE in recalculation. | * May have performance overhead if use repeatedly within large queries. | * Can offer better performance especially for large dataset or complex operations. |