View vs. Stored Procedure

A View is virtual table created from a query expression. A View is not stored physically on the disk. A View always updates because the query creating the View executes each time the View is used. A View can sometimes be the target for Insert, Update, or Delete queries.

A Stored Procedure is a group of SQL statements that can be executed as a batch. They can have parameters and may return a value. Unlike a View, Stored Procedures can modify one or more tables. They are compiled once and can be used repeatedly, which can improve performance.

Material View vs. View

Material Views are stored on the disc, while a View is not. A Materialized View is a physical copy or snapshot of the table. Unlike a View, Materialized Views need to be updated manually or by using triggers. Materialized Views respond quicker than Views since Materialized Views are precomputed. Materialized Views use memory space, but Views do not.