



Snowflake :-

→ Snowflake is a cloud based Data Warehouse (SaaS). Scalability and Performance.

→ It's used to store huge data and run (run) queries for analytics and reporting.

Who created snowflake :-

→ Snowflake was founded by Benoit Degeville, Thierry Cruanes and Marcin Zukowski.

→ 2012 in USA (California).

Why Business are move to snowflake :-

→ Business are moving to snowflake because it offers :-

- * Scalable
- * Secure
- * Cost-effective.

→ cloud data solution that outperform traditional platform.



- No Hardware - 100% Cloud.
- Storage & Compute are separate.
- Super-Fast Performance.
- Handle all Data types.
 - * JSON.
 - * XML.
 - * CSV.

Data Ware storage & Computing :-

(1) storage - "Where data is kept".

→ Stores all your data \Rightarrow structured and semi-structured (eg:- csv, json).

(2) Computing - "Engine the Processes data".

→ Execute Queries, load data and Performs transformation.

→ Compute resources are called "Virtual Warehouse".

Data types :-

- (1) Structured Data.
- (2) Semi-structured Data.
- (3) Un-structured Data.

(1) Structured Data :-

→ Data that is organized in a Pre-defined Schema - rows and columns.

Eg:- Relational Database (SQL), EXCEL Spreadsheet.

Storage :-

Easily stored in the data Warehouses like Snowflake, RDBMS.

(2) Semi-structured Data :-

→ Data that doesn't fit neatly into tables. Can't fit perfectly. Flexible.

Eg:- JSON, XML, YAML (Tree-structure)

(3) Unstructured data :-

→ Data without a Predefined format or structure, Large Size.

eg:- Images, videos, audio files, PDFs, word document.