Day 20: Advanced SPARQL Queries and Data Manipulation

Contents Covered:

Advanced SPARQL Queries:

- Further study and application of SPARQL queries to data.

- Concepts were taught through relations with SQL terms like :
  - OFFSET: Used to skip a specific number of results.
  - ATTRIBUTES: Discussed how attributes are used in SPARQL.
  - LIMIT: Restricting the number of query results.
  - SELECT: Extracting specific data.
  - WHERE: Filtering data based on conditions.
  - GROUP BY: Grouping data based on specified attributes.
  - HAVING: Filtering groups of data.

Tasks:

- Applying SPARQL queries to various datasets.

- Learning and understanding through the 'Olympics dataset which included queries like :
  - Listing names of every gold medalist.
  - Listing names of every athlete with the total number of medals.
  - Listing country with height and weight of each athlete.
  - Listing every sport name etc.

Tools Utilised:

- **Apache Jena Fuseki**: Used for running and managing SPARQL queries on datasets.

Summary:

Day 20 focused on enhancing skills in SPARQL queries, drawing parallels with SQL terms to facilitate understanding. Concepts such as OFFSET, LIMIT, SELECT, WHERE, GROUP BY, and HAVING were covered. Practical tasks involved applying these queries to the Olympic dataset, extracting specific information such as gold medalists, athletes' total medals, and sports names. The day reinforced proficiency in data manipulation and querying using Apache Jena Fuseki.

This day was crucial in setting ground for further exploration, studying more about the semantics and utilising various tools for a variety of tasks.