**4. Spring Data JPA Template**

**2.Spring Data JPA Components:**

• **Theory:**

**1.Repositories: How Spring Data JPA auto-generates repository implementations:-** Spring Data JPA provides repositories that automatically generate database query implementations, eliminating the need for writing manual SQL queries.

**2. Entities: Mapping Java objects to database tables using JPA annotations:-** In JPA (Java Persistence API), an entity is a Java class that is mapped to a database table using annotations. This allows Java objects to be stored and retrieved from a relational database without writing SQL manually.

**3. Query Methods: Creating custom queries using method naming conventions (e.g., findById, findByName):-**

**Query Methods in Spring Data JPA**

Spring Data JPA allows creating custom queries by defining method names in the repository interface. Spring automatically generates the required SQL queries based on method naming conventions.

**How Query Methods Work?**

1️.Start with a prefix: findBy, getBy, readBy, countBy, deleteBy.

2.Follow with the field name: findByName, findByEmail.  
3️.Use keywords for conditions: findByAgeGreaterThan, findByNameContaining.