**ABAP Dictionary 3 levels**

Objects in the ABAP Dictionary resided on three levels that support their re-usability. These levels are:

1. Tables and structures
2. Data elements
3. Domains

Lets look into them in detail -

**Domains**

* Describes the technical characteristics of a table field
* Specifies a value range which describes allowed data values for the fields
* Fields referring to the same domain (via the data elements assigned to them) are changed when a change is made to the domain
* Ensures consistency

**Data Elements**

* Describes the role played by a field in a technical context
* Fields of same semantic meaning can refer to the same data element
* Contains the field information

**Tables**

* Represent the Database Tables where data actually resides.
* Tables can be defined independently of the database in the ABAP Dictionary.
* The fields of the table are defined with their (database-independent) SAP ABAP data types and lengths.

**Structures**

* Are record declarations that do NOT correspond to a Database Table.
* Just like user-defined data type.
* Defined like a table and can then be addressed from ABAP programs.
* Structures contain data only during the runtime of a program.

**AGGREGATED OBJECTS OF ABAP DICTIONARY**

Aggregated means consisting of several components. In the ABAP Dictionary, aggregated objects are objects which come from several different transparent tables.

1. Views
2. Search Help
3. Lock Objects

Lets look into them in detail

**Views**

* Views in SAP \_ ABAP are used to summarize data which is distributed among several tables
* The data of a view is not actually physically stored. The data of a view is instead derived from one or more other tables
* It is tailored to the needs of a specific application

**Search Help**

* A Search help is a tool to help you search for data records in the system
* An efficient and user-friendly search assists users where the key of a record is unknown

**Lock Objects**

* Simultaneous accessing of the same data record by two users in the SAP system is synchronized by a lock mechanism.
* Locks are set and released by calling certain function modules. These function modules are generated automatically from the definition of so-called lock objects in the ABAP/4 Dictionary

**Function modules** : Enqueue\_<obj name> - to lock the table dequeue\_<obj name> - to release the lock

**Important Transactions**

* SE11 : Data Dictionary Initial Screen (SE12 Display only)
* SE13 : ABAP Dictionary : Technical Settings
* SE14 : Database Utility
* SE15 : Repository Information System
* SE16 : Data Browser
* SE17 : General table Display
* SE55 : Table View Maintenance
* SM30 : Table Maintenance