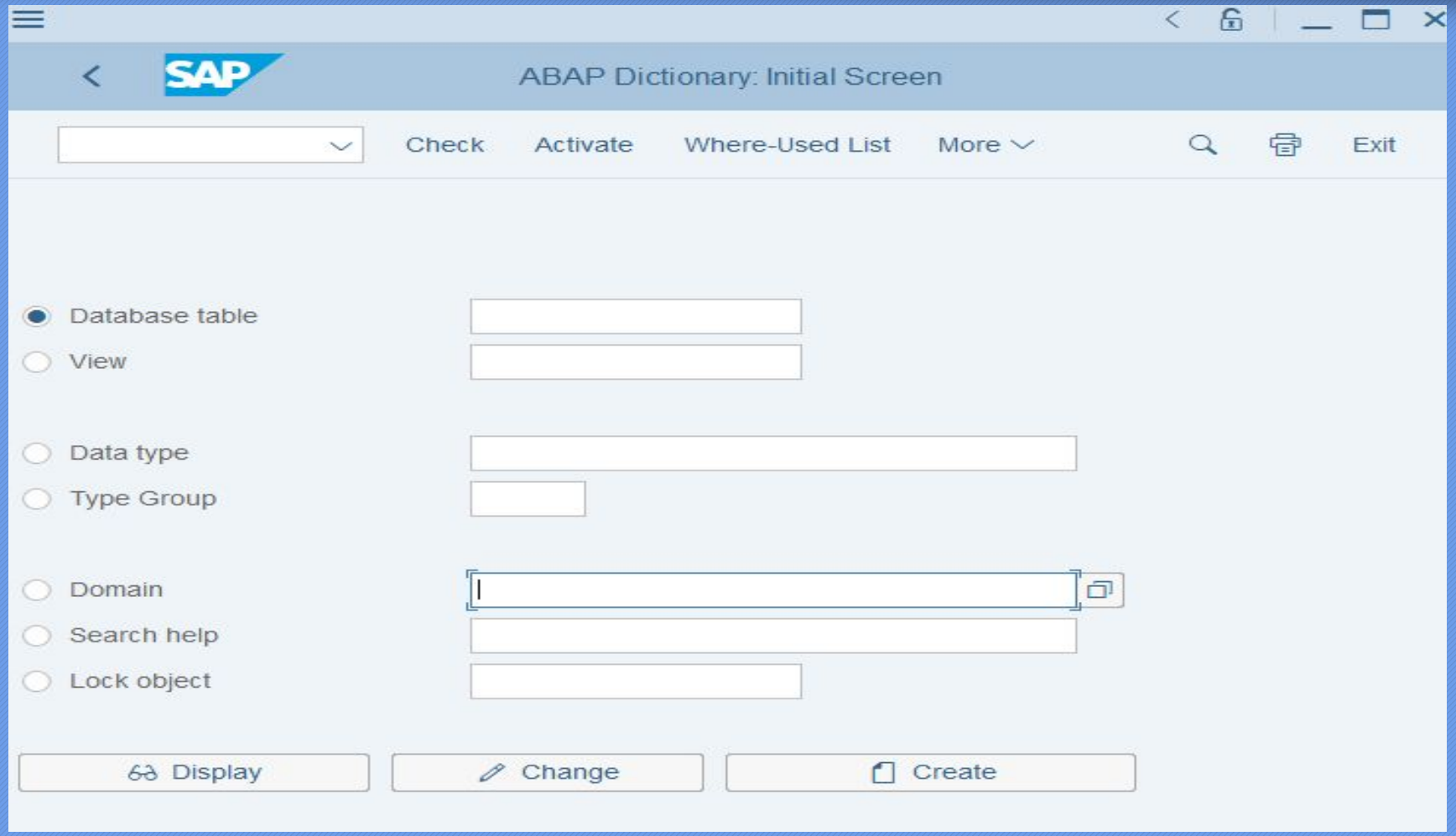
ABAP Dictionary

SAP S/4HANA Development

What is ABAP Dictionary

- ABAP Dictionary is a central source of information for the data in a information management system.
- Main function is to support the creation and management of data definitions (or “metadata”)
- ABAP Dictionary is also called as Data Dictionary or DDIC.
- How to open ABAP Dictionary initial screen
  - The transaction code for data dictionary is SE11.
  - SAP Menu >> Tools >> ABAP Workbench >> Development >> ABAP Dictionary

ABAP Dictionary : Initial Screen



DDIC : Object Types

Database Table	A table is an object in ABAP Dictionary that designates a database table
	As far as its data type is concerned, a database table is a flat structure for which further technical attributes of the database table can be defined alongside the type attributes
	The physical database table is created when a table is activated on the database
Domain	Describes the technical attributes of a field/column
	Technical attributes means data type and length.
	Domains are linked to fields via data elements.

DDIC : Object Types

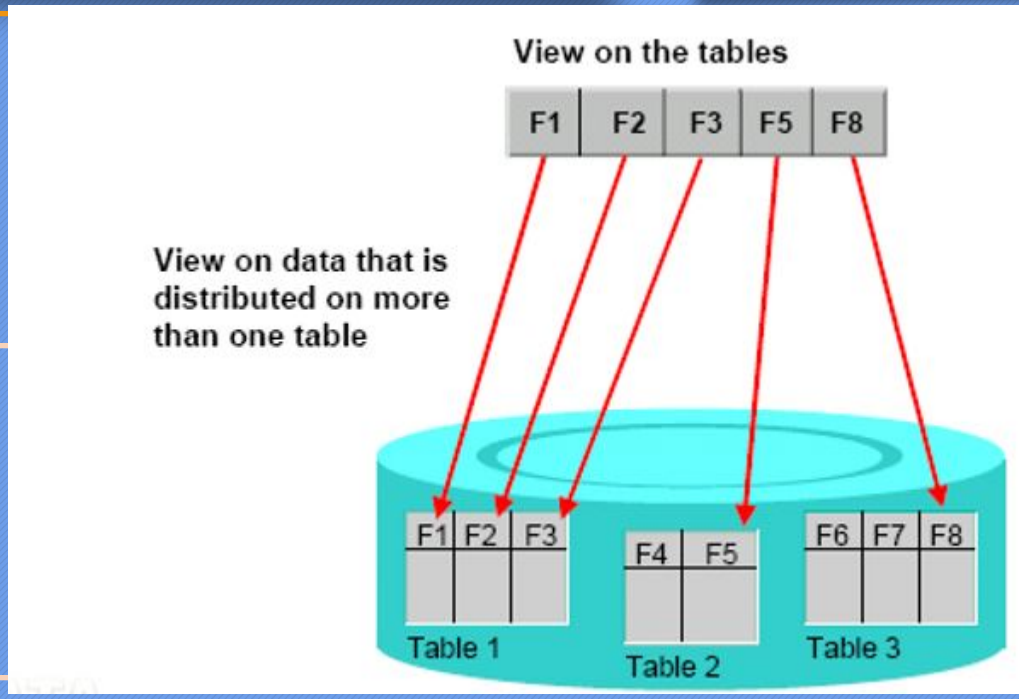
Table	Table is a collection of rows and columns.
	Tables are containers which stores data in the form of record.
	Table must have a primary key which is used to identify a record uniquely.
Data Element	Data element describes the appearance of a field/column to end user.
	It is used to provide a meaningful description to a field.

DDIC : Object Types

View

A view is a grouping of columns in one or more database tables in accordance with an application-specific view

When multiple tables are joined, a view usually implements a join with statically defined join conditions



DDIC : Object Types

Search Help	Search help is also called as value help or F4 help.
	It provides the various possible values for any input field/column.

DDIC : Object Types

Lock Objects

The purpose of lock objects is to achieve synchronization.

If multiple users want to change the same data at the same time ,then at a time only one user can change the data.

Lock objects name starts with a prefix ‘E’. When we want to create customized lock objects the name must start with EZ or EY.

There are 3 lock modes: Read lock(S), Write lock(E), Enhance write lock(X)

Lock Mode	Also Called As	Default Value	Read(Display)	Write(Change)	Additional Comments
Read Lock	Shared Lock	S	Yes	No	
Write Lock	Exclusive Lock	E	No	No	
Enhanced Write Lock	Exclusive Lock Without Cumulation	X	No	No	It protects further access for the same transaction.

Hands-On Session

Order Header Table

Field Description	Key	Data type	Length	Possible Values
Client Number	Y	CLNT	3	
Order Number	Y	NUMC	10	
Order Date	N	DATS	8	
Payment Mode	N	CHAR	1	C = Credit Card,D = Debit Card ,N = Net Banking
Total Amount	N	CURR	7,2	
Currency	N	CUKY	5	

Order Item Table

Field Description	Key	Data type	Length	Possible Values
Client Number	Y	CLNT	3	
Order Number	Y	NUMC	10	
Order Item Number	Y	NUMC	2	
Order Description	N	CHAR	40	
Item Cost	N	CURR	7,2	