# CHAPTER -9 Databases and ADO,OLEDB & ODBC

The databases fall into two distinct groups:

- 1. LOCAL DATABASE
- 2. REMOTE DATABASE

ADO:-ActiveX data object is an application program interface.

#### **REVISING DATA CONCEPTS:**

- 1. Database
- 2. Table
- 3. Recordset

#### Types of Recordset:

- 1. Table-type Recordset.
- 2. Dynaset-type Recordset
- 3. Snapshot-type recordset
- 4. Forward-only-type Recordset.
- 5. Dynamic-type Recordset.

#### DATA ACCESS MECHANISMS:

#### These are:

- 1. DAO-Data Access Object.
- 2. RDO-Remote Data Objects.
- 3. ADO-ActiveX Data Objects

NOTE:ODBC:Open Data Base Connectivity refers to a standard protocol that permits applications to connect to a variety of external database servers or files.

# ADO AND OLE DB:

### Data Provider:

Data Provider is a control or object or mechanism that provides data for use by connecting to a source of data.

#### OLE DB:

It is the underlying system service that a programmer using ADO is actually using OLEDB is a set of interfaces that provide applications with uniform access to data stored in diverse information sources.

#### ACCESSING DATABASE USING ADO DC:

VB uses ADO DC in two ways:

- 1. employing ADO DC interactively using VB connection wizard.
- 2. or writing code.ie,programming ADO(ADO DB)

## Basic Working Model of ADO:

- Step1: Connect to a data source.
- Step 2: Specify a command to gain access to the data source.
- Step 3: Execute the command.
- Step 4: Store the rows in a cache.
- Step 5: Update the data source.
- Step 6: Detect Errors.

#### USING ADO PROGRAMMATICALLY:

It comprises of seven classes or objects:

- 1. Connection.
- 2. Recordset
- 3. Field
- 4. Command
- 5. Error
- 6. Parameter
- 7. Property

Of the above seven objects four objects are primary objects:

- 1. Connection.
- 2. Recordset
- 3. Fields
- 4. Command

#### ADO Events:

There are two families of events:

- 1. ConnectionEvents.
- 2. RecordsetEvents.

#### DATA BOUND SUBFORMS:

Subforms are data entry forms that actually contain two forms within the same screen. Subforms are also called Master/detail forms.

#### ADO and ODBC:

ODBC is a standard API for database access that offers standard definitions of how to talk to databases of all kinds.ODBC was something that all DB vendors could agree to and something that did all of the basic things.

#### DSN:

Data Source Name is a logical name used by open database connectivity(ODBC) to refer to the drive and other information required to access data.

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