

ADO	ADO.NET
1. ADO provide Database Login	1. ADO . NET does not Provide Database Login
2. ADO Support Curser	2. ADO .NET doesn't Support Cursor
3. It use record Set object for storing a Data	3. It use DataSet Object for storing a Data
4. It involved one table per record set if we want to access one or more storage then we have to perform innerjoin operation in record set	4. It allow multiple record per DataSet
5. It store Data in XML format	5. It store Data in XML and Binary format
6. It use OLEDB & ODBC data provider for access data from Database	6. It use .Net framework data provider for accessing data from database
7. It use Read only and forward only old feature for reading the data from record set	7. It use Data Reader & Data Adapter object for reading the data from dataset & database
8. It execute SqlLite statement like insert, update, delete directly	8. It execute SqlLite Statement through command object, Adapter object

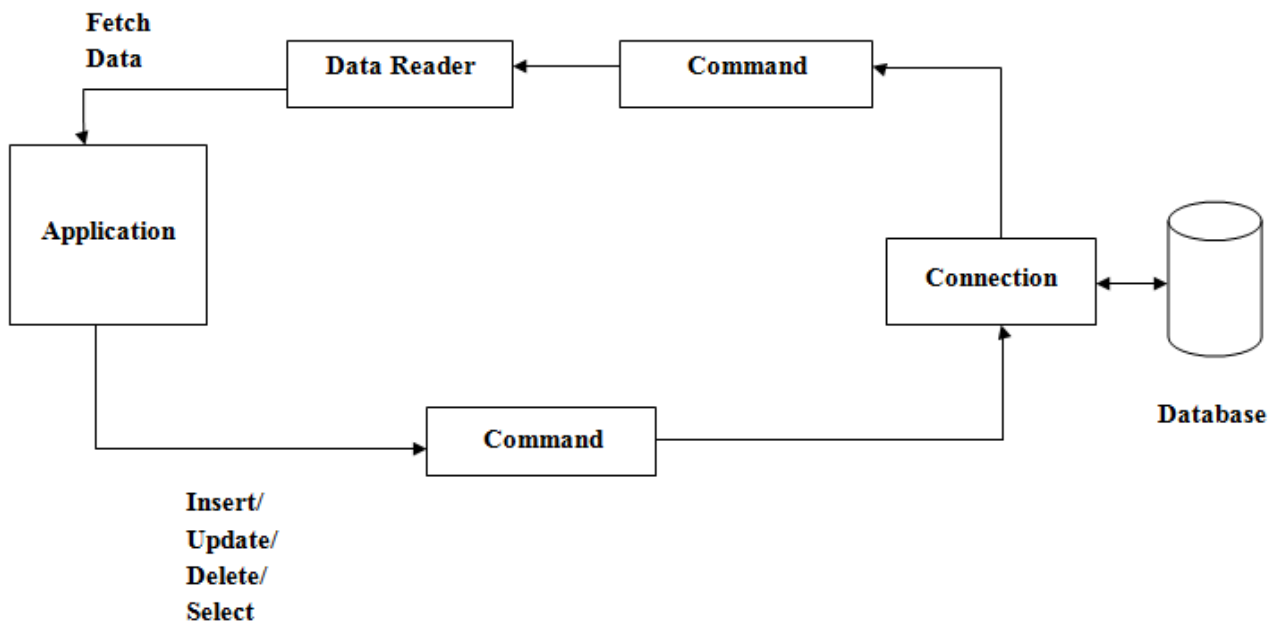
➤ **Features of Data Reader Object:**

It provides a forward only, Read only and connected stream.

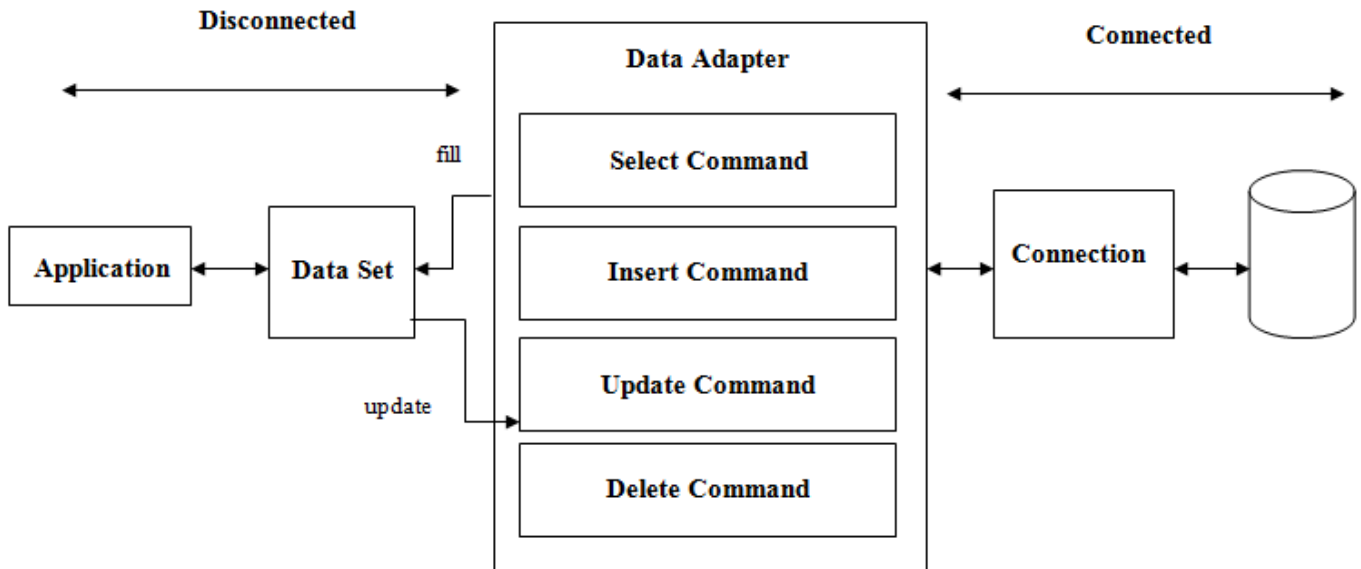
➤ **Inbuilt Data Provider:**

- .Net framework Data Provider for Sql
- .Net framework Data Provider for Oledb
- .Net framework Data Provider for ODBC
- .Net framework Data Provider for Oracle
- Entity Client Provider or Entity Model

➤ **Connected environment Working Diagram:**



➤ Disconnected Environment Working Diagram



➤ Database Connection Strings

- **Oracle Connection String:**
DataSource = Oracle 9i; Integrated Security = Yes
- **ODBC Connection String:**
Dsn=MyDSN, UID="abc", PWD="abc"
- **OLEDB Connection String:**
Provider=Microsoft.OLEDB.ACE.12.0; DataSource=D:\ABC\xyz.accedb
- **SQL Connection String:**
DataSource=ABC\SQLEXPRESS; Initial Catalog=stud; Integrated Security=True

➤ **Connection Oriented Environment DataAccess Steps (IDE)**

- 1. Create Connection Object**
- 2. Open the Connection**
- 3. Create Command Object**
- 4. Execute Method(query) with the use of command object**
- 5. If Select type of query is execute then create object of DataReader**
- 6. Close the connection**

➤ **Disconnected Environment DataAccess Steps (IDE)**

- 1. Create Connection Object**
- 2. Open the Connection**
- 3. Create DataAdapter Object which include select command, insert command, delete command, update command**
- 4. Create object of DataSet**
- 5. Invoke Fill() method of Data Adapter to fill Dataset from Database {da.Fill(ds)}**
- 6. Interaction of Data in Dataset with the use of DataAdapter**
- 7. Invoke or call Update() method of DataAdapter to apply changes in Database**
- 8. Close the connection**