Step-1:- Connection is Established to the Server.

Step-2:- data Adapter Will use select command, Sends request for the data to the server.

Step-3:- Select Query is executed at database side and the result is searched by the data Adapter filled into data set.

* once data is filled into data set Connection is no longer maintained to the server.

Step-4:- User Will be Interacting With dataset data i.e. User can search the data in dat set as Well as can perform the operations like Insertion, updation, deletion on dataset data.

Step-5:- once user Interaction is completed With data set data data Adapter Will request Command builder object and Will prepare Insert Update delete Queries.

Step-6:- data Adopter Will update the modifications to the data base.

SQL data Adaptor:-

This is used to get the data from data base to fill in data set and also used to update the data set data to data base.

Properties With data Adapter:-

1. Delete Command
2. Fill options
   - Over Write changes
   - Preserve changes
   - Upsert

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③ Insert Command

④ Update Command

⑤ Update batch size

⑥ Select Command

1) Delete Command :-

Used to set or get the Command object that contains delete query. Which is used to delete one or more records from the database table.

2) fill options :-

Used to set or get the required option that Indicates Whether the data within the data set can be overridden or not.

3) Insert Command :-

Used to set or get command object that contains Insert query Which is used to Insert one or more records in database table.

④ Update Command :-

Used to set or get update query that is used to update one or more records to the database table.

5) Update batch size :-

Used to set or get the required batch size after Which dataset modifications can be sent to database.

* Methods With data Adapter :-

1) fill (database name, string Src Table name)

2) fill schema (dataset Name, Schema Type, string Src Table Name)

3) Update (dataset Name, string Src Table Name)

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1) fill (dataset Name, string, src Table Name)

This method is used to fill the data of data base table into data set.

2) fill schema (dataset Name, schema Type, string src Table Name)

This method is used to fill the structure of the table into the data set.

3) Update (dataset Name, string src table Name)

This method is used to update the dataset data to the database.

Properties With dataset :-

① Case sensitive → True / false

② Has Errors → True / false

③ Relations

④ tables

① Case sensitive :-

When set to true data within the dataset is compared along with case. When it is Searched. false, data will not be compared along with case. When it is searched.

② Has Errors :-

This property will return true if there are

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Any Errors available in data set. Will return 'false' if there are no Errors in dataset.

③ Relations :-

This is a collection property which will store all the relations among the tables with in the dataset.

④ tables :-

This is a collection property which stores all the list of tables with in the data set.

* Methods with data set :-

1) Accept changes ( )
2) Clear ( )
3) Clone ( )
4) Copy ( )
5) Get changes ( )
6) Has changes ( )
7) Reject changes ( )

1) Accept changes :-

This method is used to make the changes of the data set permanent.

2) Clear :-

This Method is used to clear all the data of the tables present in dataset.

3) Clone :-

This method is used to copy the structure of the data set. but, This method will not copy the data of the tables.

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4) Copy:-

This method is used to copy the data of the data set and this method will not copy the structure of the data set.

5) Get changes:-

This method is used to get the modifications made in data set.

→ Return type of clone, copy, get changes method to the data set.

6) Has changes:-

This method will return true, if there are in dataset. otherwise it return false.

7) Reject changes:-

This method is used to cancel the modifications made into data set.

* Steps to Work With dataset:-

① declare data Adapter object

Syn: Class Name object Name

Ex: Sql data adopter DA;

2) define data adopter object

Syn:- object Name = NEW class Name ("select query", connection)

Ex: DA = new Sql adopter ("Select * from Empdetails", con);

3) declare dataset object

Syn: Class Name object Name

Ex: Data set DS;

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4) define dataset object

Syn:- Object Name = NEW Class Name()

Ex:- DS = NEW data set();

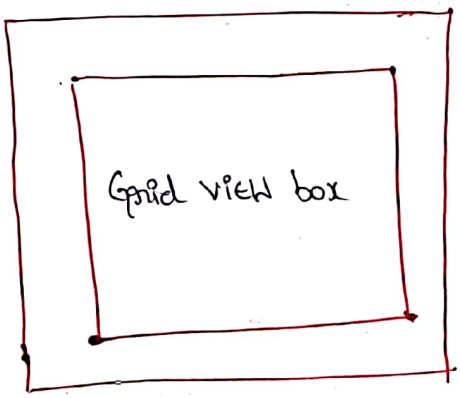
5) fill the data into dataset

Syn:- Data Adapter object . Fill (dataset Name, string srctableName);

Ex:- Da . Fill (DS, "Empdetails");

Example With dataset:-

→ To display the table data in data grid view




```
Using system.data.sqlclient;
Public Partial class form21 : form
{
Sql connection con, Sql data Adapter Da; Dataset DS;
}
Private void form21_load (object sender, Event Args e)
{
String sqlconstring = "Server = ; user Id = ;"
con = new sql connection (Sql con string);
Da = New sql data Adapter ("select * from empdetails", con);
DS = new Dataset ();
Da . Fill (DS, "Emp");
data GridView1 . data source = DS . Tables [0];
}
```

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