## QUES 1: Describe all the data provider objects with sample code

#### **SOLUTION:**

Data provider objects are:

1) Connection-

It is used to establish connections with the data source.

2) Command

It is used to perform sql queries from the database..

3) DataReader

It is used to read data from the database.

4) DataAdapter

It populates the dataset with the data source.

Ques 4: What are the two architecture in ado .net for connection create a connection, implement both architecture and show the difference

#### **SOLUTION:**

There are two types of architecture in ADO.NET:

- 1) Connected architecture
- 2) Disconnected architecture

## Connected:

In Connected architecture connection must be open before retrieving the data from the database. It was used in classes such as connection, command, and datareader. Connected hold the single table.

## Disconnected:

In disconnected architecture data can be retrieved from the database even without opening the sql connection. SqlDataAdapter object fetches the data without opening the connection. Disconnected hold the multiple tables at a time.

# QUES 8: What are the differences between DataReader, DataAdapter and DataSet?

#### SOLUTION

**DataReader-** DataReader reads the data. Datareader is used to fetch data from the database. It fetches only one row at a time. It works only in forward direction. It returns only one row at a time. It requires an open connection before fetching the data.

DataAdapter- DataAdapter is used to execute sql query and store the result in the dataset or the datatable. It fetches all the row one at a time. It can be traversed in both forward and backward direction. It manages the connection internally hence don't need to open and close the connection.

DataSet- DataSet is a set of tables that holds multiple tables one at a time. DataSet is basically used to fetch one or more tables at a time. DataAdapter is used to populate data into the dataset.

## QUES 9: What are the methods of XML dataset objects

#### **SOLUTION:**

- 1) GetXml Retrieves xml data in the dataset as a single string.
- 2) ReadXml Read xml data from a file , textreader which is used to populate the dataset.
- 3) WriteXml Write the contents of the dataset to a file or a textWriter.
- 4) GetXmlSchema() Retrieves the schema for the dataset. It returns no data.
- 5) ReadXmlSChema() Read an xml schema from a file or textReader.
- 6) WriteXmlSchema()- Write the xml schema into the dataset describing the contents of the data in the file.