


Context:

This document contains assignments to be completed as part of the hands-on for the ADO.NET day1 topic.

Assignment 1: Fetching data through datareader

Estimated time: 15 Mins

Problem description: Table tblStudent is given in below diagram:

	Column Name	Data Type	Allow Nulls
	id	int	<input type="checkbox"/>
	StudentName	varchar(50)	<input type="checkbox"/>
	Age	int	<input type="checkbox"/>
	ClassTeacherId	int	<input type="checkbox"/>

Insert some data into the table.

Write below code to retrieve data from the table:

1. Create connection string for the database
2. Create connection object, providing the connection string
3. Create sql query in a string variable to retrieve records.
4. Create SqlCommand object. Assign sql query to command text property. Assign connection object to connection property of SqlCommand object.
5. Open connection object.
6. Define SqlDataReader object. Call ExecuteReader method of command object and assign it to SqlDataReader object.
7. Read the datareader till Read() method returns true
8. Close connection object. Close reader object.
9. Display the data on console

Assignment 2: Using SqlCommand properties

Estimated time: 15 Mins

Problem description: Refer Table tblStudent given for previous question:

Write a program to get total age of all students

Hint: Use executeScalar method of SqlCommand object

Write code to perform insert, update, delete operations on the table. Display number of rows affected because of each operations.

Hint: Use executeNonQuery method of SqlCommand object

Assignment 3: Executing stored procedure

Estimated time: 15 Mins

Problem description: Create a stored procedure 'DeleteRecords' such that:

- The procedure takes studentname,age as input.
- Fire sql command to get the number of rows with the student name. Returns 'numberOfRows' as output parameter.
- Deletes the records with same student name and age.

Call the stored procedure using ADO.NET objects

Display the number of rows returned by the procedure on the console.

Assignment 4: Disconnected mode to read data

Estimated time: 15 Mins

Problem description: Use disconnected mode to read data from tblStudent. Traverse through dataset and display data on the console.

Assignment 5: Disconnected mode for data manipulation

Estimated time: 15 Mins

Problem description: Use disconnected mode to insert data to tblStudent.

Use disconnected mode to update, delete data from tblStudent.

- 1) For first row of the dataset
- 2) For a row with name as "John"

Summary of assignments:

You have learnt

- Using connected mode to read data from a database table
- How to perform DML operations in connected mode
- How to execute procedure in connected mode
- How to read data from a table in disconnected mode
- How to perform DML operations in disconnected mode