

Exam : 70-523

Title : UPG:Transition MCPD.NET

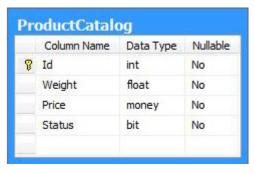
Frmwrk 3.5 Web Dev to 4

Web Dev

Version: Demo

1. You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create an application. The application connects to a Microsoft SQL Server 2008 database.

The database includes a database table named ProductCatalog as shown in the exhibit. (Click the Exhibit button.)



You add the following code segment to query the first row of the ProductCatalog table. (Line numbers are included for reference only.)

```
01 using (var cnx = new SqlConnection(connString))
02 {
03 var command = cnx.CreateCommand();
04 command.CommandType = CommandType.Text;
05 command.CommandText ="SELECT TOP 1 * FROM dbo.ProductCatalog";
06 cnx.Open();
07 var reader = command.ExecuteReader();
08 if (reader.Read()) {
09 var id = reader.GetInt32(0);
10
11 reader.Close();
12}
```

You need to read the values for the Weight, Price, and Status columns.

Which code segment should you insert at line 10?

A. var weight = reader.GetDouble(1); var price = reader.GetDecimal(2); var status = reader.GetBoolean(3);

B. var weight = reader.GetDecimal(1); var price = reader.GetFloat(2); var status = reader.GetByte(3);

C. var weight = reader.GetDouble(1); var price = reader.GetFloat(2); var status = reader.GetBoolean(3);

D. var weight = reader.GetFloat(1); var price = reader.GetDouble(2); var status = reader.GetByte(3);

Answer: A

13}

2.You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create an application. The application connects to a Microsoft SQL Server 2008 database. The database includes a table named dbo. Documents that contains a column with large binary dat a. You are creating the Data Access Layer (DAL). You add the following code segment to query the dbo.Documents table. (Line numbers are included for reference only.)

```
01public void LoadDocuments(DbConnection cnx)
```

02{

03var cmd = cnx.CreateCommand();

04cmd.CommandText = "SELECT * FROM dbo.Documents";

05...

06cnx.Open();

08ReadDocument(reader); }

You need to ensure that data can be read as a stream.

Which code segment should you insert at line 07.?

A. var reader = cmd.ExecuteReader(CommandBehavior.Default);

B. var reader = cmd.ExecuteReader(CommandBehavior.SchemaOnly);

C. var reader = cmd.ExecuteReader(CommandBehavior.KeyInfo);

D. var reader = cmd.ExecuteReader(CommandBehavior.SequentialAccess);

Answer: D

3. You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create a Windows Communication Foundation (WCF) Data Services service.

You discover that when an application submits a PUT or DELETE request to the Data Services service, it receives an error.

You need to ensure that the application can access the service.

Which header and request type should you use in the application?

A. an X-HTTP-Method header as part of a POST request

B. an X-HTTP-Method header as part of a GET request

C. an HTTP ContentType header as part of a POST request

D. an HTTP ContentType header as part of a GET request

Answer: A

4. You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create an application. The application connects to a Microsoft SQL Server 2008 database. The database includes a table that contains information about all the employees. The database table has a field named EmployeeType that identifies whether an employee is a Contractor or a Permanent employee. You declare the Employee entity base type. You create a new Association entity named Contractor that inherits the Employee base type. You need to ensure that all Contractors are bound to the Contractor class.

What should you do?

A. Modify the .edmx file to include the following line of code. <NavigationProperty Name="Type" FromRole="EmployeeType" ToRole="Contractor" />

- B. Modify the .edmx file to include the following line of code. <Condition ColumnName="EmployeeType" Value="Contractor" />
- C. Use the Entity Data Model Designer to set up an association between the Contractor class and EmployeeType.
- D. Use the Entity Data Model Designer to set up a referential constraint between the primary key of the Contractor class and EmployeeType.

Answer: B

5. You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create an application. The application uses the ADO.NET Entity Framework to model entities. The application allows users to make changes to entities while disconnected from the central data store.

You need to ensure that when the user connects to the central data store and retrieves new data, the application meets the following requirements:

- Changes made to the local data store in disconnected mode are preserved.
- Entities that have already been loaded into the local data store, but have not been modified by the user, are updated with the latest data.

What should you do?

- A. Call the query's Execute met hod by using the Merge Options Append Only option
- B. Call the query's Execute met hod by using the Merge Options Over wite Changes option
- C. Call the Refresh method of ObjectContext by using the RefreshMode.StoreWins option.
- D. Call the Refresh method of ObjectContext by using the RefreshMode.ClientWins method.

Answer: D

6. You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create an application. You are creating the data layer of the application. You write the following code segment. (Line numbers are included for reference only.)

```
01 public static SqlDataReader GetDataReader(string sql){02 SqlDataReader dr = null;0304 return dr;05}
```

You need to ensure that the following requirements are met:

- The SqlDataReader returned by the GetDataReader method can be used to retrieve rows from the database.
- SQL connections opened within the GetDataReader method will close when the SqlDataReader is closed.

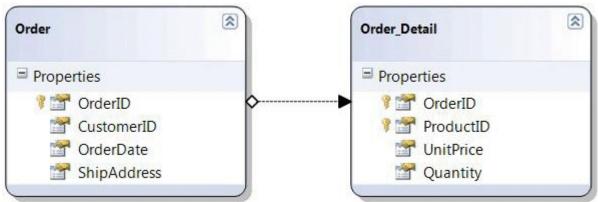
Which code segment should you insert at line 03?

```
A. using (SqlConnection cnn = new SqlConnection(strCnn)) {
  try {
    SqlCommand cmd = new SqlCommand(sql, cnn);
    cnn.Open();
    dr = cmd.ExecuteReader();
  }
  catch {
    throw;
  }
}
B. SqlConnection cnn = new SqlConnection(strCnn);
SqlCommand cmd = new SqlCommand(sql, cnn);
cnn.Open();
try {
  dr = cmd.ExecuteReader();
}
finally {
  cnn.Close();
```

```
}
C. SqlConnection cnn = new SqlConnection(strCnn);
SqlCommand cmd = new SqlCommand(sql, cnn);
cnn.Open();
try {
  dr = cmd.ExecuteReader();
  cnn.Close();
}
catch {
  throw;
}
D. SqlConnection cnn = new SqlConnection(strCnn);
SqlCommand cmd = new SqlCommand(sql, cnn);
cnn.Open();
try {
  dr = cmd.ExecuteReader(CommandBehavior.CloseConnection);
}
catch {
  cnn.Close();
  throw;
Answer: D
```

7. You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create an application. The application connects to a Microsoft SQL Server 2008 database.

You create classes by using LINQ to SQL based on the records shown in the exhibit. (Click the Exhibit button.)



You need to create a LINQ query to retrieve a list of objects that contains the OrderID and CustomerID properties. You need to retrieve the total price amount of each Order record.

What are two possible ways to achieve this goal? (Each correct answer presents a complete solution. Choose two.)

A. from details in dataContext.Order_Detail group details by details.OrderID into g join order in dataContext.Orders on g.Key equals order.OrderID

```
select new {
  OrderID = order.OrderID, CustomerID = order.CustomerID,
   TotalAmount = g.Sum(od => od.UnitPrice * od.Quantity)
}
B. dataContext.Order_Detail.GroupJoin(dataContext.Orders,
d => d.OrderID,
o => o.OrderID,
(dts, ord) => new {
   OrderID = dts.OrderID,
   CustomerID = dts.Order.CustomerID,
   TotalAmount = dts.UnitPrice * dts.Quantity
}
C. from order in dataContext.Orders
group order by order.OrderID into g
join details in dataContext.Order_Detail on g.Key equals details.OrderID
select new {
  OrderID = details.OrderID,
  CustomerID = details.Order.CustomerID,
  TotalAmount = details.UnitPrice * details.Quantity
}
D. dataContext.Orders.GroupJoin(dataContext.Order_Detail,
o => o.OrderID,
d => d.OrderID,
(ord, dts) => new {
   OrderID = ord.OrderID,
   CustomerID = ord.CustomerID,
   TotalAmount = dts.Sum(od => od.UnitPrice * od.Quantity)
}
Answer: AD
8. You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create an application. The
application connects to a Microsoft SQL Server database. The application has two DataTable objects that
reference the Customers and Orders tables in the database. The application contains the following code
segment. (Line numbers are included for reference only.
01DataSet customerOrders = new DataSet():
02customerOrders.EnforceConstraints = true;
03ForeignKeyConstraint ordersFK = new ForeignKeyConstraint("ordersFK",
04customerOrders.Tables["Customers"].Columns["CustomerID"],
05customerOrders.Tables["Orders"].Columns["CustomerID"]);
06
07customerOrders.Tables["Orders"].Constraints.Add(ordersFK);
You need to ensure that an exception is thrown when you attempt to delete Customer records that have
```

related Order records.

}

```
Which code segment should you insert at line 06?

A. ordersFK.DeleteRule = Rule.SetDefault;

B. ordersFK.DeleteRule = Rule.None;

C. ordersFK.DeleteRule = Rule.SetNull;

D. ordersFK.DeleteRule = Rule.Cascade;

Answer: B
```

9. You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create an application. The application connects to a Microsoft SQL Server database.

You write the following code segment that executes two commands against the database within a transaction. (Line numbers are included for reference only.)

```
01 using (SqlConnection connection = new SqlConnection(cnnStr)) {
02 connection.Open();
03 SqlTransaction sqlTran = connection.BeginTransaction();
04 SqlCommand command = connection.CreateCommand();
05 command.Transaction = sqlTran;
06 try {
07 ommand.CommandText = "INSERT INTO Production.ScrapReason(Name) VALUES('Wrong size')";
08 command.ExecuteNonQuery();
09 command.CommandText = "INSERT INTO Production.ScrapReason(Name) VALUES('Wrong color')";
10 command.ExecuteNonQuery ();
11
12 }
You need to log error information if the transaction fails to commit or roll back.
Which code segment should you insert at line 11?
A. sqlTran.Commit();
}
catch (Exception ex)
  sqlTran.Rollback();
  Trace.WriteLine(ex.Message);
B. sqlTran.Commit();
catch (Exception ex){
  Trace.WriteLine(ex.Message);
  try{
    sqlTran.Rollback();
  catch (Exception exRollback){
    Trace.WriteLine(exRollback.Message);
 }
```

```
C. }
catch (Exception ex){
  Trace.WriteLine(ex.Message);
  try{
    sqlTran.Rollback();
  }
  catch (Exception exRollback){
    Trace.WriteLine(exRollback.Message);
  }
}
finally{
  sqlTran.Commit();
}
D. }
catch (Exception ex){
  sqlTran.Rollback();
  Trace.WriteLine(ex.Message);
}
finally{
  try{
    sqlTran.Commit();
  catch (Exception exCommit){
    Trace.WriteLine(exCommit.Message);
  }
}
Answer: B
10. You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create an application.
The application contains the following code segment. (Line numbers are included for reference only.)
01 class DataAccessLayer
02 {
03 private static string connString;
04
05...
06 public static DataTable GetDataTable(string command){
07
08...
09}
10}
You need to define the connection life cycle of the DataAccessLayer class. You also need to ensure that
the application uses the minimum number of connections to the database.
What should you do?
```

A. Insert the following code segment at line 04.

```
private static SqlConnection conn = new SqlConnection(connString);
public static void Open(){
  conn.Open();
public static void Close(){
  conn.Close();
B. Insert the following code segment at line 04.
private SqlConnection conn = new SqlConnection(connString);
public void Open(){
  conn.Open();
public void Close(){
  conn.Close();
}
C. Replace line 01 with the following code segment.
class DataAccessLayer: IDisposable
Insert the following code segment to line 04.
private SqlConnection conn = new SqlConnection(connString);
public void Open(){
  conn.Open();
public void Dispose(){
  conn.Close();
}
D. Insert the following code segment at line 07.
using (SqlConnection conn = new SqlConnection(connString)){
  conn.Open();
}
Answer: D
11. You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create an application. You
use Microsoft ADO.NET Entity Data Model (EDM) to model entities.
You create an entity named Person with a schema defined by the following XML fragment.
<EntityType Name="CPerson">
  <Key>
    <PropertyRef Name="PersonId" />
  </Key>
  <Property Name="PersonId" Type="Int32" Nullable="false" />
  <Property Name="CompanyName" Type="String" />
  <Property Name="ContactName" Type="String" />
  <Property Name="ContactTitle" Type="String" />
  <Property Name="Address" Type="String" />
</EntityType>
```

You need to ensure that entities within the application are able to add properties related to the city, region, and country of Person's address.

What should you do?

- A. Create a new complex type named CAddress that contains the properties for city, region, and country.
- Change the Type of the Address property in CPerson to "Self.CAddress".
- B. Create a SubEntity named Address.
- Map the SubEntity to a stored procedure that retrieves city, region, and country.
- C. Create a new entity named Address.
- Add a person ID property to filter the results to display only the City, Region, and Country properties for a specific Person entity.
- D. Create a view named Name that returns city, region, and country along with person IDs.
- Add a WHERE clause to filter the results to display only the City, Region and Country properties for a specific Person entity.

Answer: A

12.You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create a Windows Communication Foundation (WCF) Data Services service. The service connects to a Microsoft SQL Server 2008 database. The service is hosted by an Internet Information Services (IIS) 6.0 server. You need to ensure that applications authenticate against user information stored in the database before the application is allowed to use the service.

Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

- A. Configure IIS to require basic authentication.
- B. Configure IIS to allow anonymous access.
- C. Configure IIS to require Windows authentication.
- D. Enable the WCF Authentication Service.
- E. Modify the Data Services service to use a Microsoft ASP.NET membership provider.

Answer: BE

- 13. You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create an application. The application uses the ADO.NET Entity Framework to manage customer and related order records. You add a new order for an existing customer. You need to associate the Order entity with the Customer entity. What should you do?
- A. Set the Value property of the EntityReference of the Order entity.
- B. Call the Add method on the EntityCollection of the Order entity.
- C. Use the AddObject method of the ObjectContext to add both Order and Customer entities.
- D. Use the Attach method of the ObjectContext to add both Order and Customer entities.

Answer: A

14. You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create a Windows Communication Foundation (WCF) Data Services service. You deploy the service to the following URL: http://contoso.com/Northwind.svc.

You want to guery the WCF Data Services service to retrieve a list of customer objects.

You need to ensure that the query meets the following requirements:

- Only customers that match the following filter criteria are retrieved: City="Seattle" AND Level > 200.

- Data is sorted in ascending order by the ContactName and Address properties.

Which URL should you use for the query?

A. http://contoso.com/Northwind.svc/Customers?City=Seattle & Level gt 200 &

\$orderby=ContactName,Address

B. http://contoso.com/Northwind.svc/Customers?City=Seattle & Level gt 200 & \$orderby=ContactName and Address

C. http://contoso.com/Northwind.svc/Customers?\$filter=City eq 'Seattle' and Level gt 200 &

\$orderby=ContactName,Address

D. http://contoso.com/Northwind.svc/Customers?\$filter=City eq 'Seattle' and Level gt 200 &

\$orderby=ContactName and Address

Answer: C

15. You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create an application. The application connects to a Microsoft SQL Server database. The application stores encrypted credit card numbers in the database. You need to ensure that credit card numbers can be extracted from the database.

Which cryptography provider should you use?

- A. DSACryptoServiceProvider
- B. AESCryptoServiceProvider
- C. MD5CryptoServiceProvider
- D. SHA1CryptoServiceProvider

Answer: B

16. You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create an application. You use the ADO.NET Entity Data Model (EDM) to define a Customer entity. You need to add a new Customer to the data store without setting all the customer's properties.

What should you do?

- A. Call the Create method of the Customer object.
- B. Call the CreateObject method of the Customer object.
- C. Override the Create method for the Customer object.
- D. Override the SaveChanges method for the Customer object.

Answer: B

17. You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create an application. The application connects to a Microsoft SQL Server database.

The application uses the following object query to load a product from the database. (Line numbers are included for reference only.)

- 01 Using advWorksContext As New AdventureWorksEntities()
- 02 Dim productQuery As ObjectQuery(Of Product) =
- 03 advWorksContext.Product.Where("it.ProductID = 900")

04

05 End Using

You need to log the command that the query executes against the data source.

Which code segment should you insert at line 04?

- A. Trace.WriteLine(productQuery.ToString())
- B. Trace.WriteLine(productQuery.ToTraceString())
- C. Trace.WriteLine(productQuery.CommandText)
- D. Trace.WriteLine((DirectCast(productQuery, IQueryable)).Expression)

Answer: B

18. You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create an application. The application connects to a Microsoft SQL Server 2008 database. The application uses DataContexts to query the database.

You create a function that meets the following requirements:

- Updates the Customer table on the database when a customer is marked as deleted.
- Updates the related entries in other tables (CustomerAddress, CustomerContacts) by marking them as deleted.
- Prevents consumer code from setting the Deleted column's value directly.

You need to ensure that the function verifies that customers have no outstanding orders before they are marked as deleted. You also need to ensure that existing applications can use the updated function without requiring changes in the code.

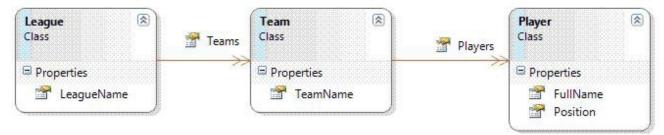
What should you do?

- A. Override the Delete operation of the DataContext object.
- B. Override the Update operation of the DataContext object.
- C. Modify the SELECT SQL statement provided to the DataContext object to use an INNER JOIN between the Customer and Orders tables.
- D. Add new entities to the DataContext object for the Customers and Orders tables.

Answer: A

19. You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create an application. The application connects to a Microsoft SQL Server database.

You create the classes shown in the following exhibit.



You add the following code segment to the application. (Line numbers are included for reference only.) 01 public void QueryPlayers(List <League> leagues) {

02

03}

You create a LINQ query to retrieve a collection of Player objects.

You need to ensure that the collection includes all the players from each team and every league.

Which code segment should you insert at line 02?

A. var query = leagues.Select(I => I.Teams.Select(t => t.Players));

B. var query = leagues.Select(I => I.Teams.SelectMany(t => t.Players));

```
C. var query = leagues.SelectMany(I \Rightarrow I.Teams.SelectMany(t \Rightarrow t.Players));
```

D. var query = leagues.SelectMany(I => I.Teams.Select(t => t.Players));

Answer: C

20.You use Microsoft Visual Studio 2010 and Microsoft .NET Framework 4 to create an application. The application connects to a Microsoft SQL Server database. The application uses a DataTable named OrderDetailTable that has the following columns: "ID "OrderID "ProductID "Quantity "LineTotal Some records contain a null value in the LineTotal field and 0 in the Quantity field. You write the following code segment. (Line numbers are included for reference only.)

01DataColumn column = new DataColumn("UnitPrice", typeof(double));

03OrderDetailTable.Columns.Add(column);

You need to add a calculated DataColumn named UnitPrice to the OrderDetailTable object. You also need to ensure that UnitPrice is set to 0 when it cannot be calculated.

Which code segment should you insert at line 02?

A. column.Expression = "LineTotal/Quantity";

B. column.Expression = "LineTotal/ISNULL (Quantity, 1)";

C. column.Expression = "if (Quantity > 0, LineTotal/Quantity, 0)";

D. column.Expression = "iif (Quantity > 0, LineTotal/Quantity, 0)";

Answer: D