# .NET Interview Question

1. You need to iterate over a collection in which you know the number of items. You need

to remove certain items from the collection. Which statement do you use?

A. switch

B. foreach

**C. for**

D. goto

1. You are processing some data from over the network. You use a HasNext and Read

method to retrieve the data. You need to run some code on each item. What do you

use?

A. for

B. foreach

**C. while**

D. do-while

1. Your code catches an IOException when a file cannot be accessed. You want to give

more information to the caller of your code. What do you do?

A. Change the message of the exception and rethrow the exception.

B. **Throw a new exception with extra information that has the IOException as**

**InnerException.**

C. Throw a new exception with more detailed info.

D. Use throw to rethrow the exception and save the call stack

1. You pass a struct variable into a method as an argument. The method changes the

variable; however, when the method returns, the variable has not changed. What

happened?

A. The variable was not initialized before it was passed in.

B. A value type cannot be changed inside a method.

**C. Passing a value type makes a copy of the data. The original wasn’t changed.**

D. The method didn’t return the changes

1. You need to expose some data from a class. The data can be read by other types but

can be changed only by derived types. What should you use?

A. A protected field

B. A public property with a protected set modifier

C. A protected property

D. **A protected property with a public get modifier**

1. You want to create a hierarchy of types because you have some implementation code

you want to share between all types. You also have some method signatures you want

to share. What should you use?

A. An interface

B. A class with virtual methods

C. **An abstract class**

D. A sealed class

1. You want to inherit from an existing class and add some behavior to a method. Which

steps do you have to take? (Choose all that apply.)

A. Use the abstract keyword on the base type.

B. **Use the virtual keyword on the base method.**

C. Use the new keyword on the derived method.

D. **Use the override keyword on the derived method.**

1. You are parsing a large piece of text to replace values based on some complex algorithm. Which class should you use?

A. StringReader

B. **StringBuilder**

C. StringWriter

D. String

1. A user needs to enter a DateTime in a text field. You need to parse the value in code.

Which method do you use?

A. DateTime.Parse

B. **DateTime.TryParse**

C. Convert.ToDateTime

D. Regex.Match

1. You want to update a specific row in the database. Which objects should you use?

(Choose all that apply.)

A. **SqlCommand**

B. SqlDataReader

C. **SqlConnection**

D. TransactionScope

1. You have a list of dates. You want to filter the dates to the current year and then select

the highest date. Which query do you use?

A. DateTime result = dates.Where(d => d == DateTime.Now).OrderBy(d => d).First();

B. **DateTime result = dates.Where(d => d.Year == DateTime.Now.Year).**

**OrderByDescending(d => d).FirstOrDefault();**

C. DateTime result = dates.Where(d => d.Year == DateTime.Now.Year).

OrderByDescending(d => d).First();

D. **DateTime result = dates.Where(d => d.Year == DateTime.Now.Year).**

**OrderByDescending(d => d).Single();**

1. You are using the following LINQ to Entities query:

var query = from p in myContext.Products

where p.Price < 50

select p;

int numberOfItems = query.Count();

var products = query.ToList();

You are suffering performance problems. How can you improve your query? (Choose

all that apply.)

A. **Avoid hitting the database multiple times.**

B. Don’t execute ToList( ) on the query.

C. **Use paging.**

D. Change the query to method syntax

1. You are working with a large group of family name objects. You need to remove all duplicates and then group them by last name. Which collections should you use? (Choose

all that apply.)

A. **Lis t<T>**

B. Stack<T>

C. **Dictionary<string,T>**

D. T[]

1. If Employee inherits from Person and Manager inherits from Employee, which of the following statements is valid?

a . **Person alice = new Employee();**

b . Employee bob = new Person();

c . Manager cindy = new Employee();

d . Manager dan = (Manager)(new Employee());

1. Suppose you have defined the House and Boat classes and you want to make a HouseBoat class

that inherits from both House and Boat. Which of the following approaches would not work?

a . **Make HouseBoat inherit from both House and Boat.**

b . Make HouseBoat inherit from House and implement an IBoat interface.

c . Make HouseBoat inherit from Boat and implement an IHouse interface.

d . Make HouseBoat implement both IHouse and IBoat interfaces.

1. Which of the following is not a good use of interfaces?

a . To simulate multiple inheritance.

b . To allow the code to treat objects that implement the interface polymorphically as if

they were of the interface’s “class.”

c . To allow the program to treat objects from unrelated classes in a uniform way.

d . **To reuse the code defined by the interface.**

1. Which of the following statements about events is false?

a . If an object subscribes to an event twice, its event handler executes twice when the

event is raised.

b . If an object subscribes to an event twice and then unsubscribes once, its event handler

executes once when the event is raised.

c **. If an object subscribes to an event once and then unsubscribes twice, its event handler**

**throws an exception when the event is raised.**

d . In a Windows Forms application, you can use the Properties window to subscribe

and unsubscribe events, and to create empty event handlers.

1. Which Command object’s method would you use to execute a query that does not return

any results?

a . **ExecuteNonQuery**

b . ExecuteDataReader

c . ExecuteScalar

d . Execute

1. Which ADO.NET object is a forward only cursor and is connected to the database while the

cursor is open?

a . **DBDataReader**

b . DataSet

c . DataTable

d . DataAdapter

1. Which line of code executes the LINQ query?

[1] var result = from i in myArray

[2] order by i

[3] select i

[4] foreach(int i in result)

[5] { …}

a . Line 1

b . Line 2

c . Line 3

d **. Line 4**

1. Before you can execute a command on a connection object, which method must you

execute to prepare the connection?

A. **Open**

B. BeginTransaction

C. GetSchema

D. Close

1. What is the best way of implementing exception handling when dealing with a

database connection?

A. Implement a try/catchblock that catches System.Exceptions.

B. Allow the exception to be thrown by the connection attempt (an unhandled

exception) and then check the Errors object .

c. **Implement a try/catch block that catches individual exception types, such as**

**SQLException .**

D. Display a message to the user indicating that an error has occurred .

1. Which of the following SQL statements is syntactically correct?

A.

**SELECT pt.ProductTypeName as ProductType, SUM(p.listPrice) as CostByProductType**

**FROM product p LEFT INNER JOIN productType pt on pt.ProductTypeID =**

**p.ProductTypeID**

**GROUP BY pt.ProductTypeName**

B.

SELECT pt.ProductTypeName as ProductType, SUM(p.listPrice) as CostByProductType

FROM product p INNER JOIN productType on pt.ProductTypeID = p.ProductTypeID

GROUP BY pt.ProductTypeName

c.

SELECT pt.ProductTypeName as ProductType, SUM(p.listPrice) as CostByProductType

FROM product p LEFT INNER JOIN productType pt on pt.ProductTypeID = p.ProductTypeID

ORDER BY pt.ProductTypeName

D.

SELECT pt.ProductTypeName as ProductType, SUM(p.listPrice) as CostByProductType

FROM product p LEFT OUTER productType pt on pt.ProductTypeID = p.ProductTypeID

GROUP BY pt.ProductTypeName

1. Which of the following statements is true?

a. The DbConnection class can be used to connect to any database .

B. **The SqlConnection class can be used to connect to a SQL Server database.**

C. **The DataAdapter class serves as a bridge between a DataSet and a data source for**

**retrieving and saving data .**

D**. The TableAdapter provides communication between your application and a**

**Database**

1. You are storing custom Car objects in a data table whose DataView property displays

a filtered list of Car objects, filtered on Make Of The Cars. If you change the make of

one of the Car objects, you want to ensure that the filter will dynamically update. What

must you do to be assured that the filter will detect the change made to your custom

Car object?

A. **Create a new Car object and assign it to the column value.**

B. Nothing, because this scenario works by default