1.

List 2 differences between arraylist and linkedlist?

An arraylist is a non-generic collection of objects whose size increases dynamically A linked list is a linear data structure, in which the elements are not stored at contiguous memory location.

Differences

1. Arraylist can be indexed while a linkedlist cannot be indexed instead, it uses pointers to link each element to the next one in the list.
2. Arraylist is better for random access workloads while linkedlist is better for some head-or-tail-insert heavy workloads.
3.

List and explain 4 types of LinkedList you know

1. Singly LinkedList
2. Doubly LinkedList
3. Singly Circular LinkedList
4. Doubly Circular LinkedList
5.

What data structures do the stack and queue each implement?

They are both of Linear-dynamic data structure The stack and queue data structures are implement using the Stack and Queue classess respectively 4. List 4 arraylist methods

1. Add
2. Remove
3. Insert
4. Sort
5.

List and explain 3 operations each in stack and queue

Stack

1. Push: Adds and element to the top of the stack
2. Pop: Removes and returns the element at the top of the stack
3. Peek: Returns the element at the top of the stack without removing it.

Queue

1. Enqueue: Adds an element to the end of the queue.
2. Dequeue: Removes and returns the element at the beginning of the queue
3. Peek: Returns the element at the beginning of the queue without removing it.
4.

The name of the class that raises an events is called __ and the class who receives the notification is called _ ?

The name of the class that raises an event is called Publisher and the class who receives the notification is called subscriber. 7. What namespace does the hashtable belong to?

System.Collections 8. What do you understand by delegates in C#? List and explain the 3 types of delegate in c#

Delegates are type of variable that can hold a reference to a method or an object that references a method.

1. Delegates allow method to be passed as parameters.
2. They can be used to define a callback function.
3. Delegate is a type that safely encapsulate a method.

Three types of delegates

1. Singlecast delegate: A delegate that points to a single method
2. Multicast delegate: A delegate that points to multiple methods.
3. Generic delegate: A delegate that can point to any method with a compatible signature.
4.

The stack class implements the IEnumerable, ICollection, and ICloneable, true or false?

true 10. What are anonymous methods used for in C#?

Lambda expression are anonymous methods that are can be used to create delegates or expression tree types. Anonymous methods are used to define a method without a name. They are often used as a parameter to a method that expects a delegate. They are helpful for writing LINQ query expressions.