1. **Purpose of the finally block:**  
   Runs code regardless of whether an exception occurs, typically for cleanup (e.g., closing files, releasing resources).
2. **How int.TryParse() improves robustness compared to int.Parse():**  
   TryParse() returns false instead of throwing an exception if parsing fails, preventing crashes and avoiding try-catch overhead.
3. **Exception when accessing .Value on a null Nullable<T>:**  
   InvalidOperationException.
4. **Why check array bounds before accessing elements:**  
   Prevents IndexOutOfRangeException and avoids reading/writing invalid memory.
5. **How GetLength(dimension) is used:**  
   Returns the number of elements in a specific dimension of a multi-dimensional array (0 for rows, 1 for columns).
6. **Memory allocation difference (jagged vs rectangular arrays):**
   1. **Rectangular array:** single continuous memory block for all elements.
   2. **Jagged array:** array of separate arrays, each row stored independently in memory.
7. **Purpose of nullable reference types in C#:**  
   Makes nullability explicit in the type system, enabling compiler warnings for possible null dereferences.
8. **Performance impact of boxing/unboxing:**
   1. **Boxing:** Allocates a new object on the heap (extra memory + time).
   2. **Unboxing:** Requires type check and value copy, slower than direct value type operations.
9. **Why must out parameters be initialized inside the method:**  
   C# requires all out parameters to be assigned before the method exits to ensure the caller gets a definite value.
10. **Why optional parameters must appear at the end:**  
    Ensures that positional arguments match parameters correctly and avoids ambiguity in method calls.
11. **How null propagation operator (?.) prevents NullReferenceException:**  
    Stops evaluation and returns null immediately if the object before ?. is null.
12. **When a switch expression is preferred over if statements:**
    1. When mapping one value to another concisely.
    2. Improves readability for multiple fixed comparisons.
13. **Limitations of the params keyword:**
    1. Only one params parameter per method.
    2. Must be the last parameter.
    3. Works only with a single-dimensional array.