

# Utilizing Advanced Statements

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# Three Useful Operators

**Ternary Operator**

**Null Conditional**

**Null Coalescing**



```
int bigger = x > y ? x : y;
```

## Ternary Operator

**Shorthand if/else statement**

**Test and return first term if true, second if false**



```
List<string> authors = null;  
int? count = authors?.Count;  
string message = count == null ?  
    "count is null" : "count is not null";  
Console.WriteLine(message);
```

## Null Conditional

Used with collections and classes

The operator is **?.** (Question Mark, dot [period])



```
List<string> authors = null;

Int? howMany = authors?.Count ?? 0;
Console.WriteLine("Null coalescing. howMany = " + howMany);

authors = new List<string>() {
    "hello",
    "world"
};

howMany = authors?.Count ?? 0;
Console.WriteLine("Null coalescing. howMany = " + howMany);
```

## Null Coalescing

Operator is written as two question marks ( ?? )

“If the left hand operand is **NOT** null, return it.  
Otherwise, return the right hand operator.”



# Demo



**Ternary**

**Null**



# Summary

Ternary Operator

```
int bigger = x > y ? x : y;
```

Null Conditional

```
authors?.Count
```

Null Coalescing

```
authors?.Count ?? 0
```

