

# Nullable types

# What is Nullable type?

- instances of the `System.Nullable<T>` struct.
- Can represent all the values of an underlying type `T`, and an additional null value.
- The underlying type `T` can be any non-nullable value type.
- `T` cannot be a reference type.

# When to use Nullable type?

- When you need to represent the undefined value of an underlying type
- Database value

```
int? x = null;
```

# ?? Operator

- Called **Null-coalescing** operator
- It returns the left-hand operand if the operand is not null
- Otherwise it returns the right hand operand

```
// Set y to the value of x if x is NOT null; otherwise,  
// if x == null, set y to -1.  
int y = x ?? -1;
```