

# Optionals

# Optional

When a value could be absent

Represents two possibilities for its value

The value is present or **nil**

String?    Int?    Double?



```
// Declaring an optional string  
var name: String?
```

```
// Declaring an optional string
```

```
var name: String?
```

```
// Declaring an optional string
```

```
var name: String?
```

```
// Internally it's an enum
```

```
enum Optional<String>{
```

```
    case none
```

```
    case some(String)
```

```
}
```

```
// Declaring an optional string
```

```
var name: String?
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```
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    case none
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    case some(String)
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}
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```
// Declaring an optional string
```

```
var name: String?
```

```
// Internally it's an enum
```

```
enum Optional<String>{
```

```
    case none                nil
```

```
    case some(String)        The assigned value
```

```
}
```

```
// Declaring an optional string
```

```
var name: String?
```

```
print ( name )
```



```
// Declaring an optional string
```

```
var name: String?
```

```
print ( name )
```

```
nil
```

```
// Declaring an optional string
```

```
var name: String?
```

```
print ( name )
```

```
nil
```

```
// Assigning value to the var
```

```
name = "Danilo"
```

```
print ( name )
```

```
// Declaring an optional string
```

```
var name: String?
```

```
print ( name )
```

```
nil
```

```
// Assigning value to the var
```

```
name = "Danilo"
```

```
print ( name )
```

```
// Declaring an optional string  
var name: String?
```

```
print ( name )
```

nil

```
// Assigning value to the var  
name = "Danilo"
```

```
print ( name )
```

Optional("Danilo")

```
// Declaring an optional string  
var name: String?
```

```
print ( name )
```

nil

```
// Assigning value to the var  
name = "Danilo"
```

```
print ( name )
```

Optional("Danilo")

```
// Suffix to unwrap the optional value  
print ( name! )
```

```
// Declaring an optional string  
var name: String?
```

```
print ( name )
```

nil

```
// Assigning value to the var  
name = "Danilo"
```

```
print ( name )
```

Optional("Danilo")

```
// Suffix to unwrap the optional value  
print ( name! )
```

Danilo

```
// Casting a String to a Number  
let numberFromText = "97"  
let castedText = Int(numberFromText)  
  
print ( castedText )
```

```
// Casting a String to a Number
```

```
let numberFromText = "97"
```

```
let castedText = Int(numberFromText)
```

```
print ( castedText )
```



```
// Casting a String to a Number
```

```
let numberFromText = "97"
```

```
let castedText = Int(numberFromText)
```

```
print ( castedText )
```

```
// Casting a String to a Number
```

```
let numberFromText = "97"
```

```
let castedText = Int(numberFromText)
```

```
print ( castedText )
```

Optional(97)

```
// Casting a String to a Number
```

```
let numberFromText = "97"
```

```
let castedText = Int(numberFromText)
```

```
print ( castedText )
```

Optional(97)

```
// Casting a String to a Number
```

```
let numberFromText = "0i"
```

```
let castedText = Int(numberFromText)
```

```
print ( castedText )
```

```
// Casting a String to a Number
```

```
let numberFromText = "97"
```

```
let castedText = Int(numberFromText)
```

```
print ( castedText )
```

Optional(97)

```
// Casting a String to a Number
```

```
let numberFromText = "0i"
```

```
let castedText = Int(numberFromText)
```

```
print ( castedText )
```

```
// Casting a String to a Number
```

```
let numberFromText = "97"
```

```
let castedText = Int(numberFromText)
```

```
print ( castedText )
```

Optional(97)

```
// Casting a String to a Number
```

```
let numberFromText = "0i"
```

```
let castedText = Int(numberFromText)
```

```
print ( castedText )
```

nil

```
// Casting a String to a Number
```

```
let numberFromText = "97"
```

```
let castedText = Int(numberFromText)
```

```
print ( castedText! )
```

97

```
// Casting a String to a Number
```

```
let numberFromText = "0i"
```

```
let castedText = Int(numberFromText)
```

```
print ( castedText )
```

nil

```
// Declaring an optional string
var surname: String?

// Checking if the value is not nil
if surname != nil {
    print("Surname is \(surname)")
}
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```
// Declaring an optional string
var surname: String?

// Checking if the value is not nil
if surname != nil {
    print("Surname is \(surname)")
}

surname = "Santana"

// Checking if the value is not nil
if surname != nil {
    print("Surname is \(surname)")
}
```

```
// Declaring an optional string
var surname: String?

// Checking if the value is not nil
if surname != nil {
    print("Surname is \(surname)")
}

surname = "Santana"

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if surname != nil {
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}
```

```
// Declaring an optional string
```

```
var surname: String?
```

```
// Checking if the value is not nil
```

```
if surname != nil {
```

```
    print("Surname is \(surname)")
```

```
}
```

```
surname = "Santana"
```

```
// Checking if the value is not nil
```

```
if surname != nil {
```

```
    print("Surname is \(surname)")
```

```
}
```

```
Surname is Optional("Santana")
```

```
// Declaring an optional string  
var surname: String? = "Santana"
```

```
// Checking if the value is not nil  
if surname != nil {  
    print("Surname is \(surname)")  
}
```

Surname is Optional("Santana")

```
// Declaring an optional string  
var surname: String? = "Santana"
```

```
// Checking if the value is not nil  
if surname != nil {  
    print("Surname is \(surname)")  
}
```

Surname is Optional("Santana")

```
// Optional binding  
if let sName = surname {  
    print("The user surname is \(sName)")  
}
```

Surname is Santana

```
// Declaring an optional string  
var surname: String? = "Santana"
```

```
// Checking if the value is not nil  
if surname != nil {  
    print("Surname is \(surname)")  
}
```

Surname is Optional("Santana")

```
// Optional biding  
if let sName = surname {  
    print("The user surname is \(sName)")  
}
```

Surname is Santana

```
// Declaring an optional string  
var surname: String? = "Santana"
```

```
// Checking if the value is not nil  
if surname != nil {  
    print("Surname is \(surname)")  
}
```

Surname is Optional("Santana")

```
// Optional biding  
if let sName = surname {  
    print("The user surname is \(sName)")  
}
```

Surname is Santana

```
// Declaring an optional string
var surname: String?

// Force unwrapping
print("Surname is \(surname!)")

// Optional binding
if let sName = surname {
    print("The user surname is \(sName)")
}
```



```
// Declaring an optional string
```

```
var surname: String?
```

```
// Force unwrapping
```

```
print("Surname is \(surname!)" )
```

```
// Optional binding
```

```
if let sName = surname {
```

```
    print("The user surname is \(sName)" )
```

```
}
```

```
// Declaring an optional string
var surname: String?

// Force unwrapping
print("Surname is \(surname!)")

// Optional binding
if let sName = surname {
    print("The user surname is \(sName)")
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```
// Declaring an optional string
```

```
var surname: String?
```

```
// Force unwrapping
```

```
print("Surname is \(surname!)" )
```

```
// Optional binding
```

```
if let sName = surname {
```

```
    print("The user surname is \(sName)" )
```

```
}
```

```
fatal error:  
unexpectedly found nil  
while unwrapping an  
Optional value
```

*Hands on*

