

# Extension

Adding functionality to an Existing Classes / Structures /  
Enums

***-Devendranath***

*For Offline/ Online Training, reach me@ [iPhoneDev1990@gmail.com](mailto:iPhoneDev1990@gmail.com)*

Functionality of an existing class, structure or enumeration type can be extended / added with the help of extensions. Type functionality can be added with extensions but overriding the functionality is not possible with extensions. You can add functionality like Computed Properties, functions and subscripts.

The additional functionality could be

- i. You can not add stored properties with extension
- ii. Adding class or instance methods
- iii. Providing custom initialisers.
- iv. Overriding the existing functionality is not recommended.

Syntax:

```
extension Class/Structure/Enum
```

```
{
```

```
    Additional functions / structures / subscripts
```

```
    NOTE: Stored properties are not allowed
```

```
}
```

*For Offline/ Online Training, reach me@ [iPhoneDev1990@gmail.com](mailto:iPhoneDev1990@gmail.com)*

```
extension Int {  
    var add: Int {return self + 100 }  
    var sub: Int { return self - 10 }  
    var mul: Int { return self * 10 }  
    var div: Int { return self / 5 }  
}
```

```
let addition = 3.add  
println("Addition is \ (addition)")
```

```
let subtraction = 120.sub  
println("Subtraction is \ (subtraction)")
```

```
let multiplication = 39.mul  
println("Multiplication is \ (multiplication)")
```

```
let division = 55.div  
println("Division is \ (division)")
```

```
let mix = 30.add + 34.sub  
println("Mixed Type is \ (mix)")
```

```
extension String{
    var newExtProperty: String{
        get{
            return self.newExtProperty;
        }

        set
        {
            self.newExtProperty = newValue
        }
    }

    func aNewMethod()
    {
        print("This is new method added through Extensions")
    }
}
```

```
var aString: String = "Hello";
```

```
aString.aNewMethod();
```

```
aString.newExtProperty = "This is new property";
```

*For Offline/ Online Training, reach me@ [iPhoneDev1990@gmail.com](mailto:iPhoneDev1990@gmail.com)*

# Thank You

*For Offline/ Online Training, reach me@ [iPhoneDev1990@gmail.com](mailto:iPhoneDev1990@gmail.com)*