TEB

iOS Programlama Eğitimi 5. Gün

ARC

- Automatic Reference Counting
- Swift'te hafıza yönetimi
- ARC, artık bir nesneye ihtiyaç kalmayınca onun kapladığı hafızayı serbest bırakır. (Geri verir)

```
class Person {
    let name: String
    init(name: String) {
        self.name = name
        println("\(name) is being initialized")
    }
    deinit {
        println("\(name) is being deinitialized")
    }
}
```

var reference1: Person?

var reference2: Person?

var reference3: Person?

```
reference1 = Person(name: "John Appleseed")
// prints "John Appleseed is being initialized"
```

```
reference2 = reference1
reference3 = reference1
```

```
reference1 = nil
// prints nothing

reference2 = nil
// prints nothing

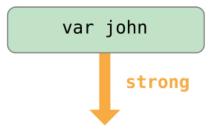
reference3 = nil
// prints "John Appleseed is being deinitialized"
```

```
class Person {
    let name: String
    init(name: String) { self.name = name }
    var apartment: Apartment?
    deinit { println("\(name\) is being deinitialized") }
class Apartment {
    let number: Int
    init(number: Int) { self.number = number }
    var tenant: Person?
    deinit { println("Apartment #\(number) is being
deinitialized") }
```

var john: Person?

var number73: Apartment?

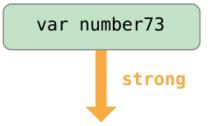
```
john = Person(name: "John Appleseed")
number73 = Apartment(number: 73)
```



<Person instance>

name: "John Appleseed"

apartment: nil

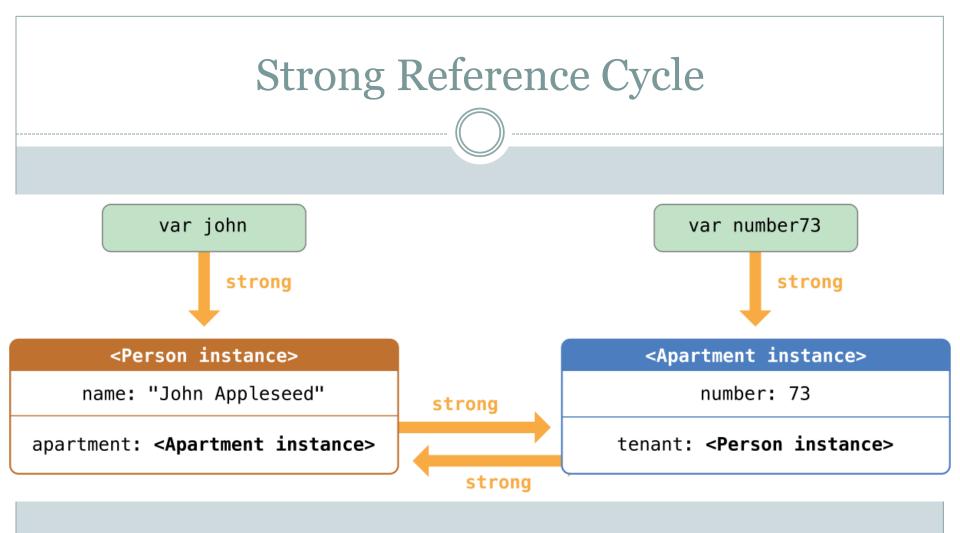


<Apartment instance>

number: 73

tenant: nil

```
john!.apartment = number73
number73!.tenant = john
```



```
john = nil
// prints nothing
number73 = nil
// prints nothing
```

var john

var number73

<Person instance>

name: "John Appleseed"

apartment: <Apartment instance>

strong

number: 73

tenant: <Person instance>

<Apartment instance>

strong

- Soru: Nasıl çözülür?
- Cevap: Weak Reference

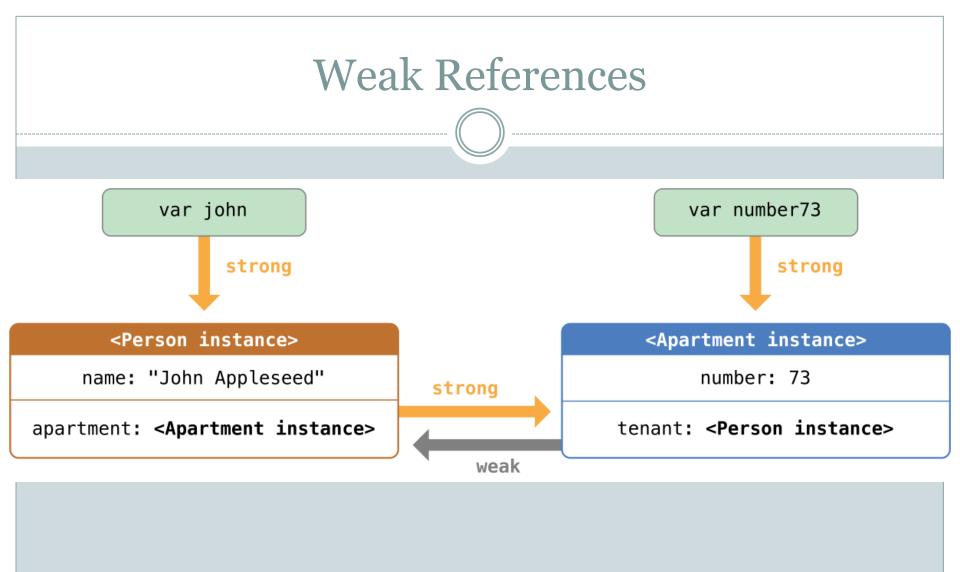
```
class Person {
    let name: String
    init(name: String) { self.name = name }
    var apartment: Apartment?
    deinit { println("\(name\) is being deinitialized") }
class Apartment {
    let number: Int
    init(number: Int) { self.number = number }
    var tenant: Person?
    deinit { println("Apartment #\(number) is being
deinitialized") }
```

```
class Person {
    let name: String
    init(name: String) { self.name = name }
    var apartment: Apartment?
    deinit { println("\(name\) is being deinitialized") }
class Apartment {
    let number: Int
    init(number: Int) { self.number = number }
    weak var tenant: Person?
    deinit { println("Apartment #\(number) is being
deinitialized") }
```

```
var john: Person?
var number73: Apartment?

john = Person(name: "John Appleseed")
number73 = Apartment(number: 73)

john!.apartment = number73
number73!.tenant = john
```



```
john = nil
// prints "John Appleseed is being deinitialized"
```

var john

var number73

<Person instance>

name: "John Appleseed"

apartment: <Apartment instance>

strong

weak

<Apartment instance>

number: 73

tenant: <Person instance>

number73 = nil
// prints "Apartment #73 is being deinitialized"

var john

var number73

<Person instance>

name: "John Appleseed"

apartment: <Apartment instance>

<Apartment instance>

number: 73

tenant: <Person instance>

weak

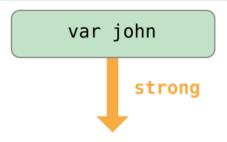
• Reference Cycle kırıldı

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 Not: Sadece değişkenler weak olarak tanımlanabilir, sabitler weak olamaz.

```
class Customer {
   let name: String
    var card: CreditCard?
    init(name: String) {
        self.name = name
    deinit { println("\(name\) is being deinitialized") }
class CreditCard {
    let number: UInt64
    unowned let customer: Customer
    init(number: UInt64, customer: Customer) {
        self.number = number
        self.customer = customer
    deinit { println("Card #\(number) is being deinitialized") }
```

```
var john:Customer? = Customer(name: "John Appleseed")
john!.card =
CreditCard(number:1234_5678_9012_3456, customer:john!)
```



<Customer instance>

name: "John Appleseed"

card: <CreditCard instance>

strong

unowned

<CreditCard instance>

number: 1234_5678_9012_3456

customer: <Customer instance>

```
john = nil
// prints "John Appleseed is being deinitialized"
// prints "Card #1234567890123456 is being deinitialized"
```

var john

<Customer instance>

name: "John Appleseed"

card: <CreditCard instance>

strong

unowned

<CreditCard instance>

number: 1234_5678_9012_3456

customer: <Customer instance>