

Class Inheritance

Extend and reuse code

Overview

- `NSObject`
- Subclass
- Overriding Methods
- `super`

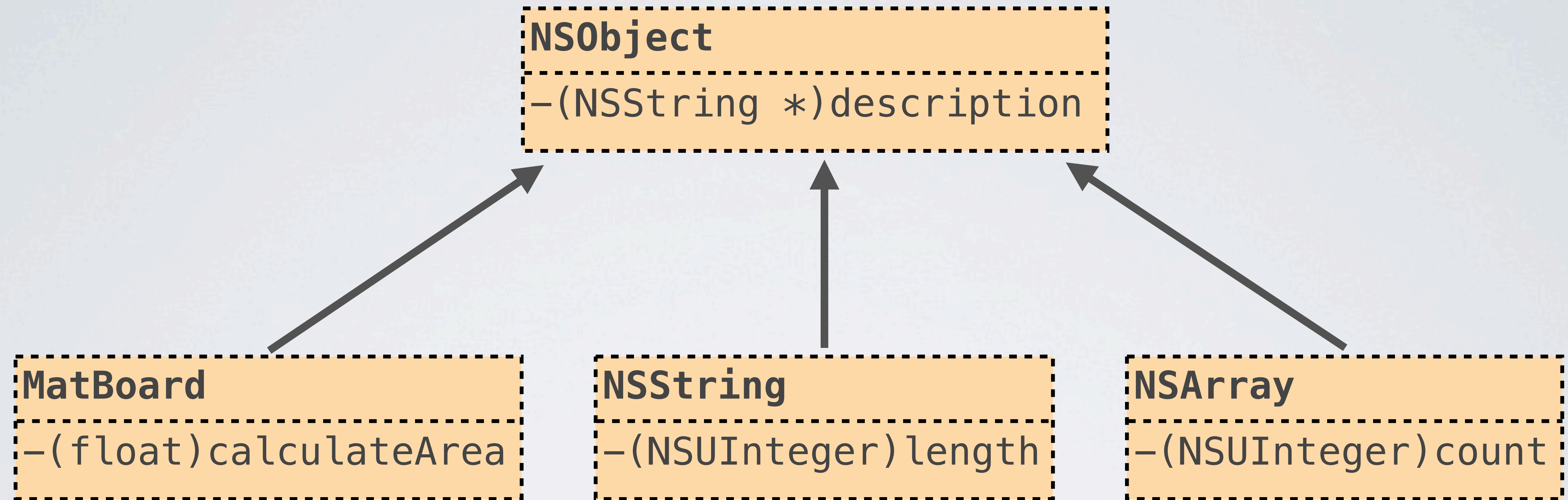
NSObject

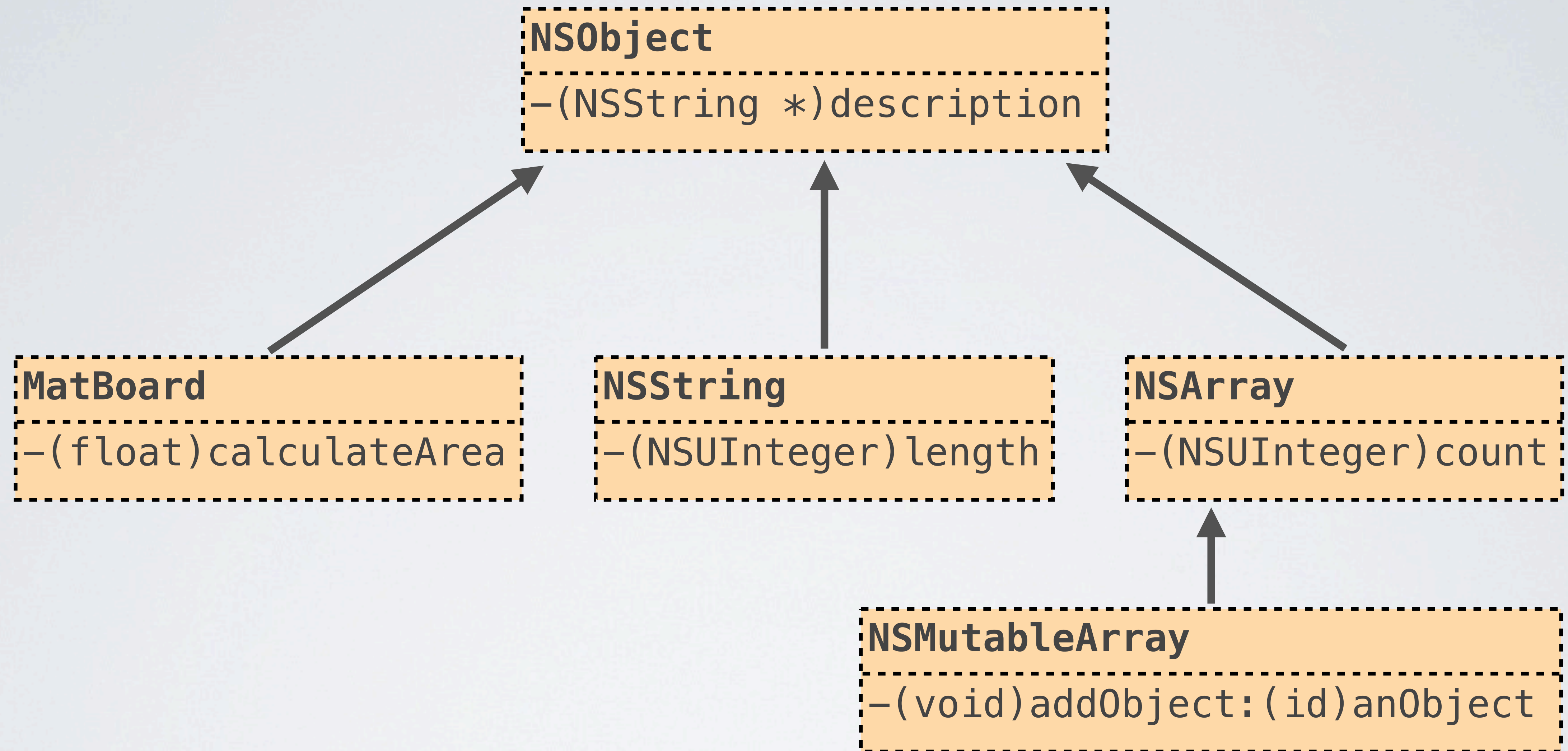
```
@interface MatBoard : NSObject {  
    float _width;  
    float _height;  
}
```

```
@end
```

NSObject

`-(NSString *)description`





Car

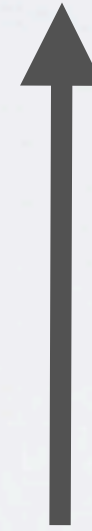
float milesPerGallon

float gasTankCapacity

-(float)distancePerGasTank

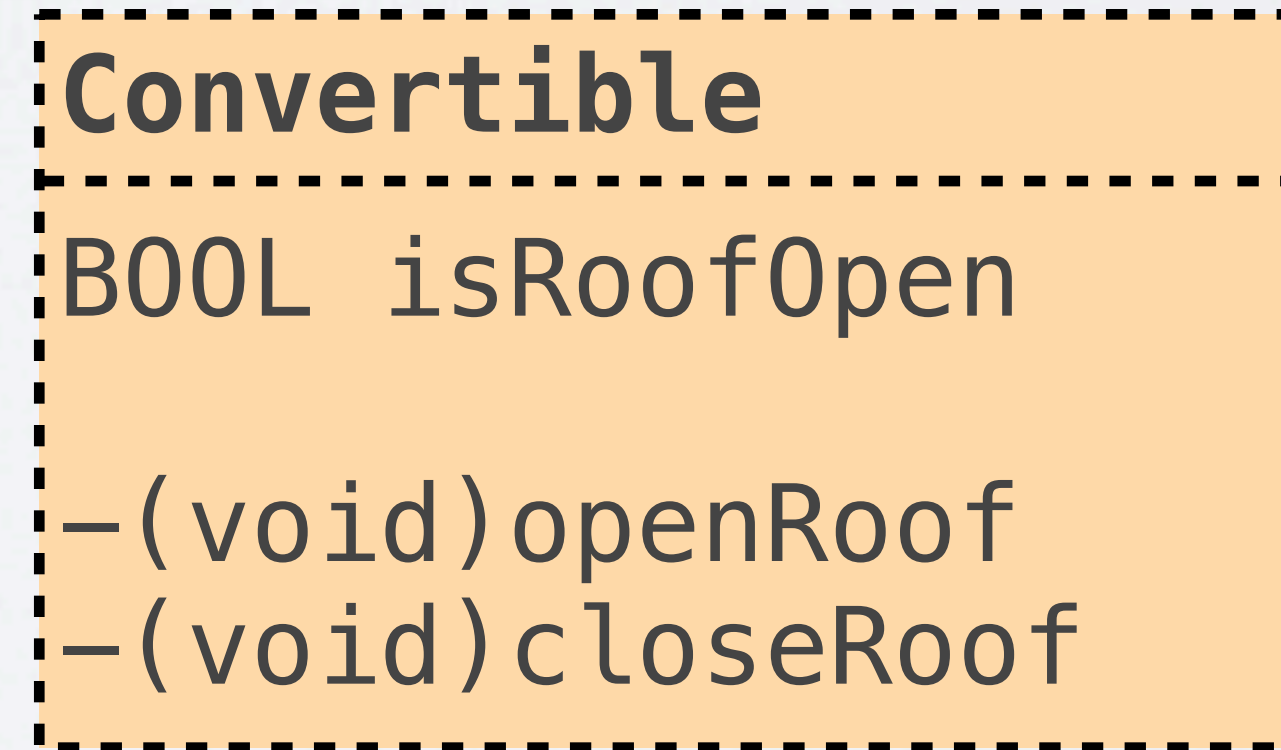
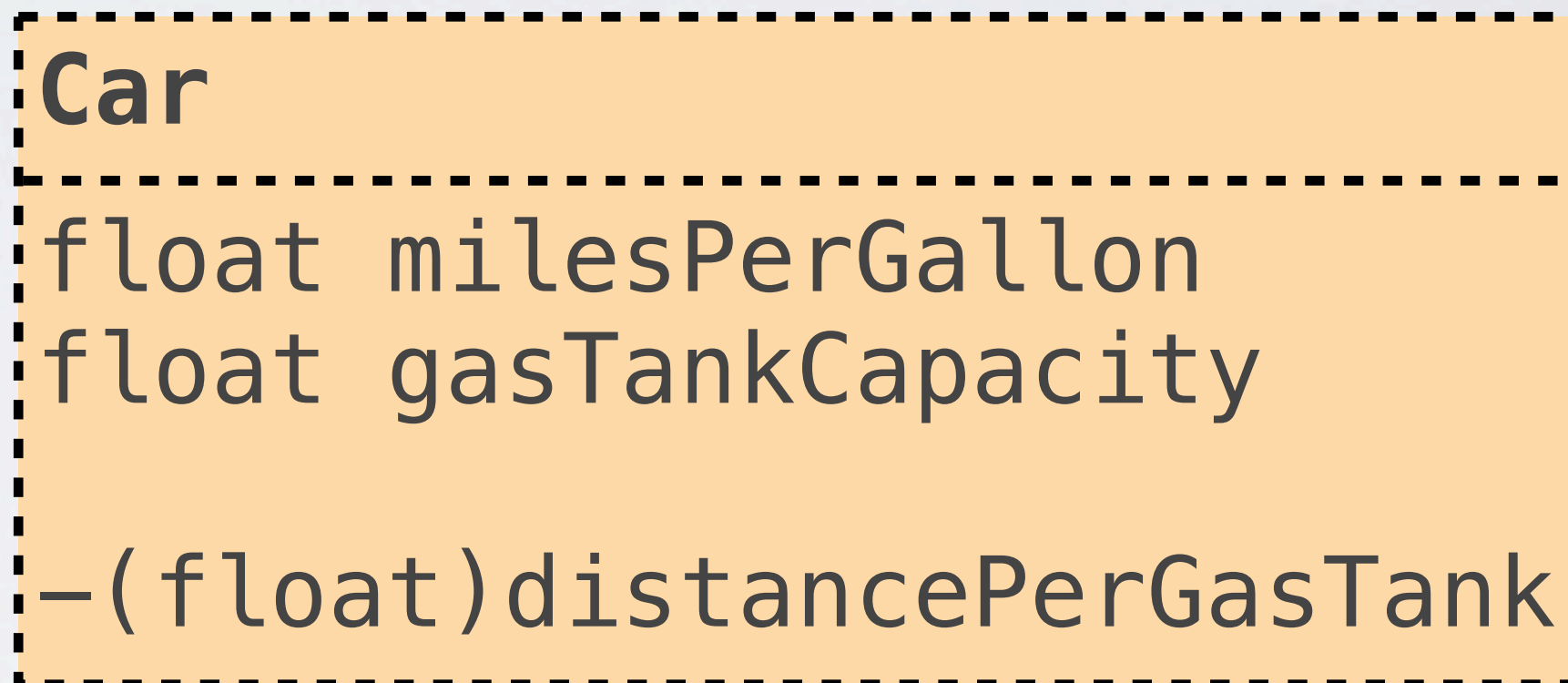
Car

```
float milesPerGallon  
float gasTankCapacity  
  
-(float)distancePerGasTank
```



Convertible

```
BOOL isRoofOpen  
  
-(void)openRoof  
-(void)closeRoof
```

```
main()  
Convertible *myCar
```

NSObject

Class isa

Car

float milesPerGallon
float gasTankCapacity

-(float)distancePerGasTank

Convertible

BOOL isRoofOpen

-(void)openRoof

-(void)closeRoof


```
main()  
Convertible *myCar
```

```
Convertible  
isa  
milesPerGallon = 20  
gasTankSize = 10  
isRoofOpen = YES
```

```
NSObject  
Class isa
```

```
Car  
float milesPerGallon  
float gasTankCapacity  
-(float)distancePerGasTank
```

```
Convertible  
BOOL isRoofOpen  
-(void)openRoof  
-(void)closeRoof
```

Review

- NSObject
- Subclass
- Overriding Methods
- **super**

