

OBJECTIVE-C NUMBERS

http://www.tutorialspoint.com/objective_c/objective_c_numbers.htm

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In Objective-C programming language, in order to save the basic data types like int, float, bool in object form,

Objective-C provides a range of methods to work with NSNumber and important ones are listed in following table.

S.N.	Method and Description
1	+ NSNumber * numberWithBool:BOOLvalue Creates and returns an NSNumber object containing a given value, treating it as a BOOL.
2	+ NSNumber * numberWithChar:charvalue Creates and returns an NSNumber object containing a given value, treating it as a signed char.
3	+ NSNumber * numberWithDouble:doublevalue Creates and returns an NSNumber object containing a given value, treating it as a double.
4	+ NSNumber * numberWithFloat:floatvalue Creates and returns an NSNumber object containing a given value, treating it as a float.
5	+ NSNumber * numberWithInt:intvalue Creates and returns an NSNumber object containing a given value, treating it as a signed int.
6	+ NSNumber * numberWithInteger:NSIntegervalue Creates and returns an NSNumber object containing a given value, treating it as an NSInteger.
7	- BOOLboolValue Returns the receiver's value as a BOOL.
8	- charcharValue Returns the receiver's value as a char.
9	- doubledoubleValue Returns the receiver's value as a double.
10	- floatfloatValue Returns the receiver's value as a float.

11 - ***NSNumber*integerValue**

Returns the receiver's value as an NSInteger.

12 - ***NSNumber*intValue**

Returns the receiver's value as an int.

13 - ***NSString* * stringValue**

Returns the receiver's value as a human-readable string.

Here is a simple example for using NSNumber which multiplies two numbers and returns the product.

```
#import <Foundation/Foundation.h>

@interface SampleClass:NSObject

- (NSNumber *)multiplyA:(NSNumber *)a withB:(NSNumber *)b;

@end

@implementation SampleClass

- (NSNumber *)multiplyA:(NSNumber *)a withB:(NSNumber *)b
{
    float number1 = [a floatValue];
    float number2 = [b floatValue];
    float product = number1 * number2;
    NSNumber *result = [NSNumber numberWithFloat:product];
    return result;
}

@end

int main()
{
    NSAutoreleasePool * pool = [[NSAutoreleasePool alloc] init];

    SampleClass *sampleClass = [[SampleClass alloc]init];
    NSNumber *a = [NSNumber numberWithFloat:10.5];
    NSNumber *b = [NSNumber numberWithFloat:10.0];
    NSNumber *result = [sampleClass multiplyA:a withB:b];
    NSString *resultString = [result stringValue];
    NSLog(@"The product is %@",resultString);

    [pool drain];
    return 0;
}
```

Now when we compile and run the program, we will get the following result.

```
2013-09-14 18:53:40.575 demo[16787] The product is 105
```

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