# **Objective C Tutorial**

Objective-C is an object-oriented programming language.

It is the main programming language used by Apple for the OS X and iOS operating systems and their respective APIs, Cocoa and Cocoa Touch.

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

int main (int argc, const char * argv[])
{
   NSAutoreleasePool * pool = [[NSAutoreleasePool alloc] init];

   NSLog (@"hello world");
   [pool drain];
   return 0;
}
```

#### **Objective-C Variables**

Туре	Storage size	Value range
char	1 byte	-128 to 127 or 0 to 255
unsigned char	1 byte	0 to 255
signed char	1 byte	-128 to 127
int	2 or 4 bytes	-32,768 to 32,767 or -2,147,483,648 to 2,147,483,647
unsigned int	2 or 4 bytes	0 to 65,535 or 0 to 4,294,967,295

short	2 bytes	-32,768 to 32,767
unsigned short	2 bytes	0 to 65,535
long	4 bytes	-2,147,483,648 to 2,147,483,647
unsigned long	4 bytes	0 to 4,294,967,295

## **Arithmetic Operators**

Operator	Description
+	Adds two operands
-	Subtracts second operand from the first
*	Multiplies both operands
/	Divides numerator by denominator
%	Modulus Operator and remainder of after an integer division
++	Increment operator increases integer value by one
	Decrement operator decreases integer value by one

### **Relational Operators**

Operator	Description
==	Checks if the values of two operands are equal or not.
!=	Checks if the values of two operands are not equal.
>	Checks if the value of left operand is greater than the value of right operand.
<	Checks if the value of left operand is less than the value of right operand.
>=	Checks if the value of left operand is greater than or equal to the value of right operand.
<=	Checks if the value of left operand is less than or equal to the value of right operand.

### **Logical Operators**

Operator	Description
&&	Logical AND operator. If both the operands are non zero then condition becomes true.
	Logical OR Operator. If any of the two operands is non zero then condition becomes true.
!	Logical NOT Operator. Reverse the logical state of its operand. If a condition is true, then Logical NOT operator will make false.

### **Assignment Operators**

Operator	Description
=	Assignment operator, Assigns values from right side operands to left side operand
+=	Add AND assignment operator, It adds right operand to the left operand and assigns the result to left operand
-=	Subtract AND assignment operator, It subtracts right operand from the left operand and assigns the result to left operand
*=	Multiply AND assignment operator, It multiplies right operand with the left operand and assigns the result to left operand
/=	Divide AND assignment operator, It divides left operand with the right operand and assigns the result to left operand
%=	Modulus AND assignment operator, It takes modulus using two operands and assigns the result to left operand
<<=	Left shift AND assignment operator
>>=	Right shift AND assignment operator
&=	Bitwise AND assignment operator
^=	bitwise exclusive OR and assignment operator
=	bitwise inclusive OR and assignment operator