

# **Complete Java Masterclass @Udemy.com**

**CareerDevs Classroom Presentation  
December 18, 2017  
@GeekyCoderr**

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Resources available

# COMPLETE JAVA MASTERCLASS

Any Questions?  
Ask them in the course forum.

with Tim Buchalka  
@timbuchalka



# **Brief Overview Section 5 & 6**

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**The view from 10,000 feet up.**

**We started this tutorial a week ago.**

**How far did you get?**

**That's a rhetorical question. You don't have to tell me.**

**Before you can get to the fun stuff like  
OOP...**





**Just like a  
pastry chef has  
to learn how to  
measure and  
calculate  
before they  
make great  
yummy cakes...**



# We have to learn the boring stuff like Keywords, Expressions, Statements, Code blocks, Methods and more...

```
public class Methods {  
  
    public static void main(String[] args) {  
  
        int num = 5;  
  
        double pi = 3.14;  
  
        System.out.println(num);  
  
        System.out.println(pi);  
  
        otherMethod();  
    }  
  
    public static void otherMethod() {  
  
        double num2 = 6.28;  
  
        System.out.println(num2);  
  
    }  
}
```





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# List of Java keywords

From Wikipedia, the free encyclopedia

In the [Java programming language](#), a **keyword** is one of **53 reserved words**<sup>[1]</sup> that have a predefined meaning in the language; because of this, programmers cannot use keywords as names for [variables](#), [methods](#), [classes](#), or as any other [identifier](#).<sup>[2]</sup> Due to their special functions in the language, most [integrated development environments](#) for Java use [syntax highlighting](#) to display keywords in a different colour for easy identification.

## Contents [hide]

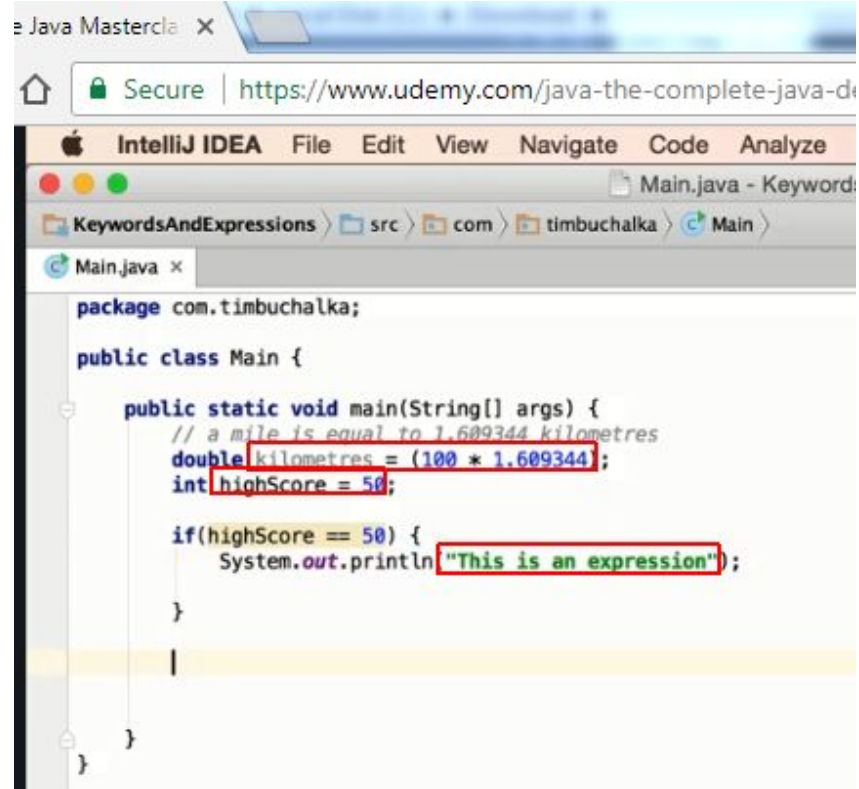
- [List](#)
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```
public void processData()  
{  
    do  
    {  
        int data = getData();  
        if(data < 0)  
            performOperation1(data);  
        else  
            performOperation2(data);  
    }  
    while(hasMoreData());  
}
```

A snippet of Java code with keywords highlighted in blue and bold font

# Expressions are anything between the datatype and the semi-colon

```
1 var now = new Date();
2 var hours = now.getHours();
3 var minutes = now.getMinutes();
4 var seconds = now.getSeconds();
5
6 var ampm = "am";
7 var colon = "<img SRC='images/colon.gif'>";
8
9 if (hours == 12) {
10     ampm = "pm";
11     hours = hours - 12;
12 }
13
14 if (hours == 0) hours = 12;
15
16 if (hours < 10) hours = "0" + hours;
17 else hours = hours + "";
18
19 if (minutes < 10) minutes = "0" + minutes;
20 else minutes = minutes + "";
21
22 if (seconds < 10) seconds = "0" + seconds;
23 else seconds = seconds + "";
24
```



The screenshot shows the IntelliJ IDEA IDE with a Java file named Main.java. The code defines a package, a class, and a main method. Several expressions are highlighted with red boxes to illustrate the concept:

- `100 * 1.609344` in the calculation of `kilometres`.
- `highScore == 50` in the `if` statement condition.
- `"This is an expression"` in the `System.out.println` statement.

```
package com.timbuchalka;

public class Main {

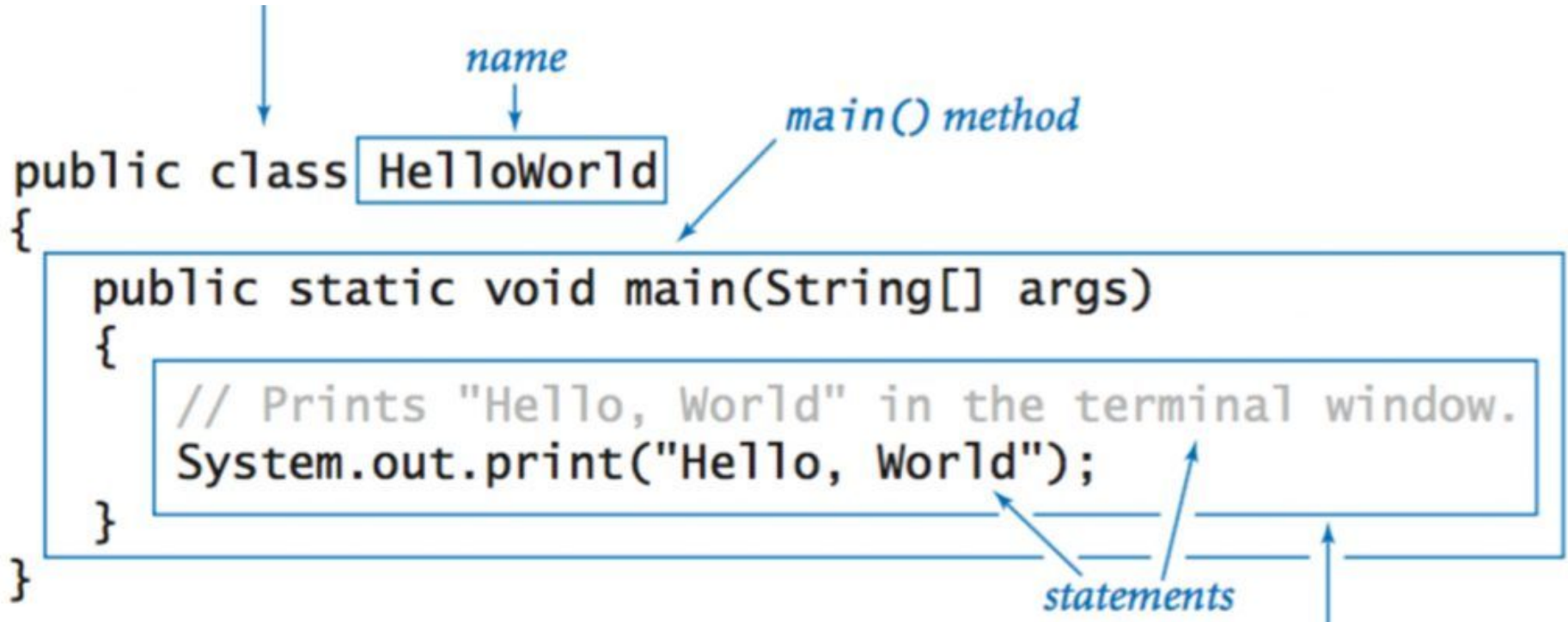
    public static void main(String[] args) {
        // a mile is equal to 1.609344 kilometres
        double kilometres = (100 * 1.609344);
        int highScore = 50;

        if(highScore == 50) {
            System.out.println("This is an expression");
        }

    }
}
```

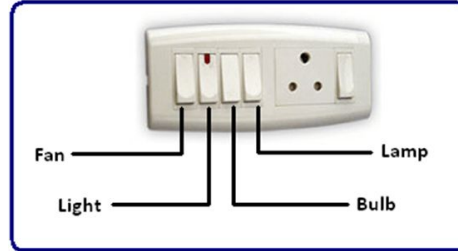


# Statements, Code Blocks, Methods and more...



# Control Flow Statements

```
1 import java.util.*;
2 public class hello {
3     private static Scanner input;
4     public static void main(String[] args) {
5         Random rnd=new Random();
6         int z=rnd.nextInt(5);
7         int x=99;
8         while(x!=z) {
9             System.out.println("輸入數字:(0-4)")
10            input = new Scanner(System.in);
11            x= input.nextInt();
12            switch (x) {
13                case 1:
14                    System.out.println("ONE");
15                    break;
16                case 2:
17                    System.out.println("TWO");
18                    break;
19                case 3:
20                    System.out.println("THREE");
21                    break;
22                default:
23                    System.out.println("其他");
24            }
25        }
26        System.out.println("z="+z);
27    }
28 }
```



Switch - syntax

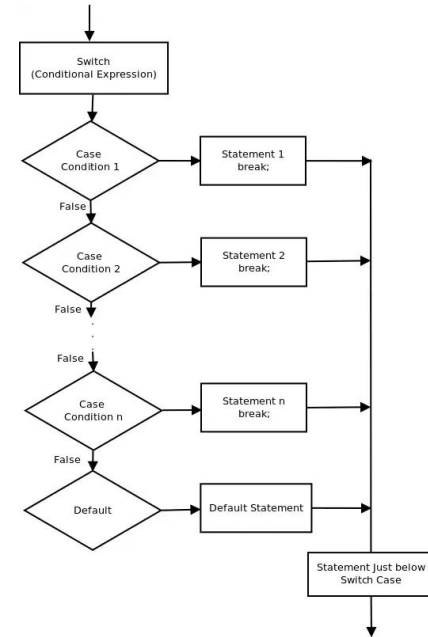
- The general syntax of a switch statement is:

switch  
and  
case  
are  
reserved  
words

```
switch ( expression ){
    case value1 :
        statement-list1
    case value2 :
        statement-list2
    case value3 :
        statement-list3
    case ...
}
```

If expression  
matches value3,  
control jumps  
to here

```
public void processData()
{
    do
    {
        int data = getData();
        if(data < 0)
            performOperation1(data);
        else
            performOperation2(data);
    }
    while(hasMoreData());
}
```





Hex



## Assembler



```
main()
{
    char ch,*text;
    int bit;
    int data;
    FILE *f;
    struct
    {
        int
        data;
    }
    g;
}
```

C



## Fortran

C++

A man in a brown suit is shown from the side, carrying a large, futuristic weapon. The weapon has a long barrel and a complex, mechanical design. The man is walking towards the right.

# Java



Ruby