

## Chap. 1:

- The basic components of a computer and what's the basic function of each part;
- How to write a simple Java program that prints out "hello world" and run it;
- The general process of developing a Java program (.java -> .class, executed in JVM)

## Chap2:

- The basic parts of a Java program;
- **Primitive data types** and how to use them **define variables** (also how to declare a constant variable) and the rule for naming variables;
- **Arithmetic Operators** ( combined operators, +=, -=, and so on) ;
- Statements;
- Comments;
- Misc.:
  1. print, println
  2. **String class**
  3. Escape sequences (start with '\', know what '\n' means)
  4. Scanner class (read the input from the keyboard)

## Chap. 3 Conditional Structures

- What is if statement for?
- What if the if-body contains multiple statements? ( {.. } )
- Can you **draw the flow chart** of an if-else statement?
- Nested if-statements;
- What are **the relational operators**? How to use them to represent a boolean expression?
- What are the **logical operators**? What do they mean?
- Switch statement;
- Misc.:
  1. **String format method;**
  2. **String compare method;**

## Chap. 4 Loops

- Three kinds of loops: do-while, while-do, for
- Can **you draw the flow chart for three kinds of loops?**
- What do **'++'** and **'--'** mean?
- Avoid infinite loops
- Misc.:
  1. PrintWriter for writing data to a file
  2. Scanner for reading data from a file

## Chap 5 Methods

- How to define a method?
- Be able to describe the process of function call
- **Types of the parameters and return data;**
- What are local variables? and their lifetime?