

JAVA PROGRAMMING

PROFESSOR KO

SYSTEM ENVIRONMENT OF PROGRAMMING ARCHITECTURE

Introduction and installation of Unix system, Ubuntu, WSL, Eclipse IDE, Github, Visual Studio Code, and software architecture from BIOS, OS, networking communication, applications, to information system.

Chrome extension with Speak it, AI grammar check
Microsoft edge with Copilot.

Several white lines of varying lengths and orientations are drawn in the bottom right corner of the slide, creating a modern, abstract graphic element.

JAVA PROGRAMMING

<https://www.programiz.com/java-programming/examples>

W3Schools Java Tutorial

<https://www.w3schools.com/java/default.asp>

Oracle's Java Tutorials

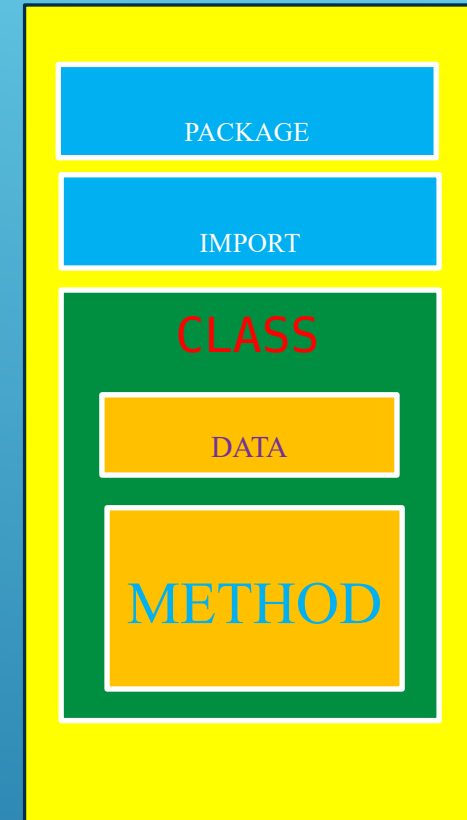
<https://docs.oracle.com/javase/tutorial/>

Several white lines of varying lengths and orientations are positioned on the right side of the slide, creating a modern, abstract graphic element.

JAVA PROGRAMMING COMPONENTS (CLASS、VARIABLE、FUNCTION、CONSTRUCT)

Class declaration

- ▶ `Public class ClassName {}`
 - ▶ The first character must be capital
 - ▶ Its name must be its file name
 - ▶ It contains DATA and METHOD
 - ▶ It can be used as the blueprint of instance
- ▶ PACKAGE is the directory of software suite
- ▶ IMPORT brings the software suite



```
public class MyClass {  
    public static void main(String args[])  
    {  
        System.out.println("Hello, World!");  
    }  
}
```

HELLO WORLD

Several white lines of varying lengths and slopes are positioned in the bottom right corner of the slide, creating a modern, abstract graphic element.

- ▶ Class variable is initiated when its instance is born; therefore, each instance has its variable generated. For example: A Person class can have many instances thus each one has different personal ID.

CLASS VARIABLE

- ▶ formula
- ▶ `Public ClassName (參數) {}`
 - ▶ It contains the blueprint to generate instance.
 - ▶ It is different from method due to no reply.

CONSTRUCT

- ▶ `ClassName a = New ClassName();`
 - ▶ 'a' : variable name
 - ▶ 'new' : system word
 - ▶ 'ClassName()' : construct

DECLARATION OF INSTANCE VARIABLE