

# **Code Structures**

CPE231 Algorithms 1 / 2025 [29<sup>th</sup> Aug 2025]



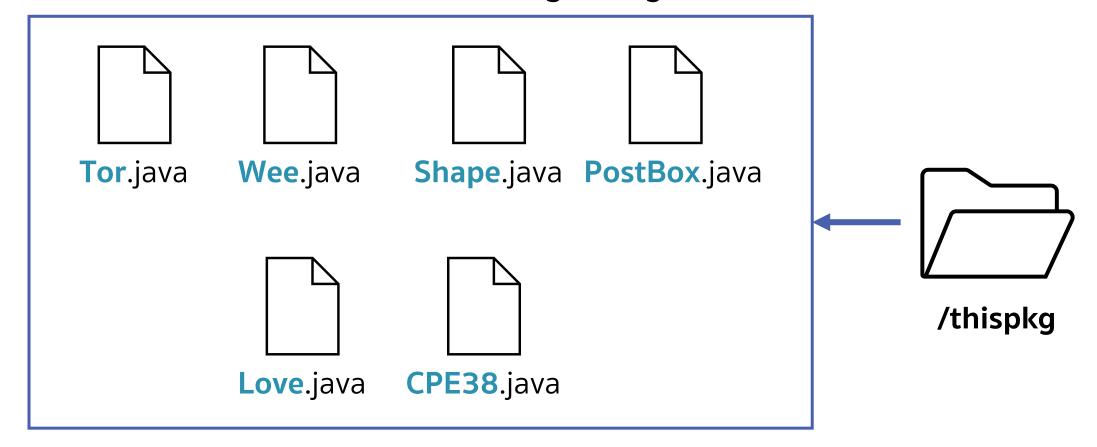
Previously...

```
public class GraphM extends AdjM{
                                                           boolean isDirected;
                                                           int numVertices;
     * คือเชียนในไฟล์ พากนี้
                                                           int numEdges;
                                                           public GraphM(int n, boolean isDirected){
                                                           public void addEdge(int i, int j, int weight){
                                 Extends -
GraphL
                          Graph M
                                                                   public class Main {
                                                                       Run | Debug
                                                                       public static void main(String[] args) {
                                                                          GraphL graph = new GraphL(isDirected:false, numVertices:10, numEdges:14);
                         uses - + ชกครอย่าง เช่น
           Main
                                                               BinTree
       My Algorithm
                Extends.
                                                                Bin Node
         Algorithm
```



## Introducing "Package"

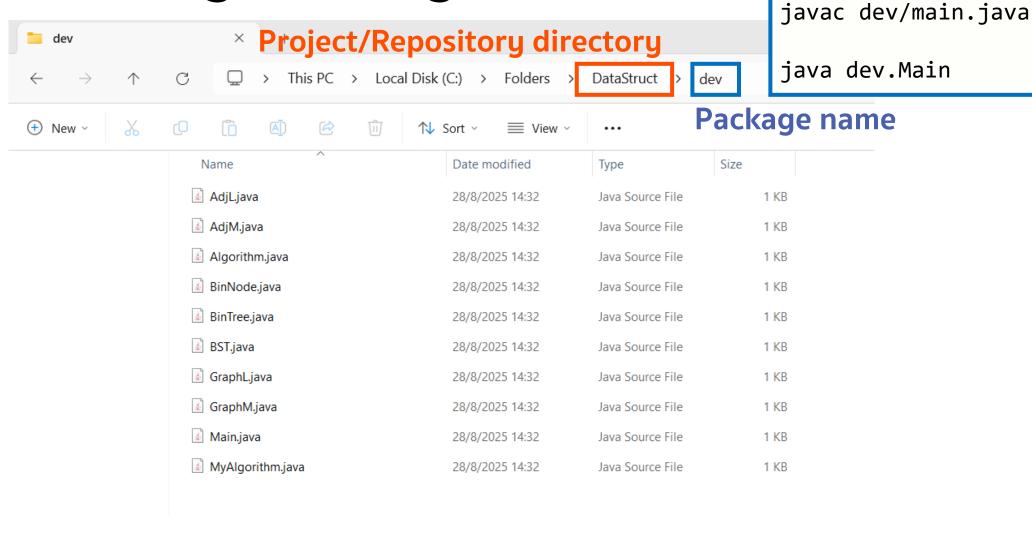
• Think about **Folders** containing many Java files (classes).



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Introducing "Package"





#### **Package Naming Convention**

- Java package naming convention are as follows:
  - Package name are all written in lower case.
  - Companies uses <u>Reversed Internet Domain name</u> to begin their package name.
- You are the student (developer) at CPE, KMUTT. So you are like a programmer in <u>algorithm.cpe.kmutt.ac.th</u>
- Thus, the package (reverse domain name) is as follow:

th.ac.kmutt.cpe.algorithm



#### **Package Naming Convention**

 So, in this semester, you are going to name your package as follow:

th.ac.kmutt.cpe.algorithm.[yourName]

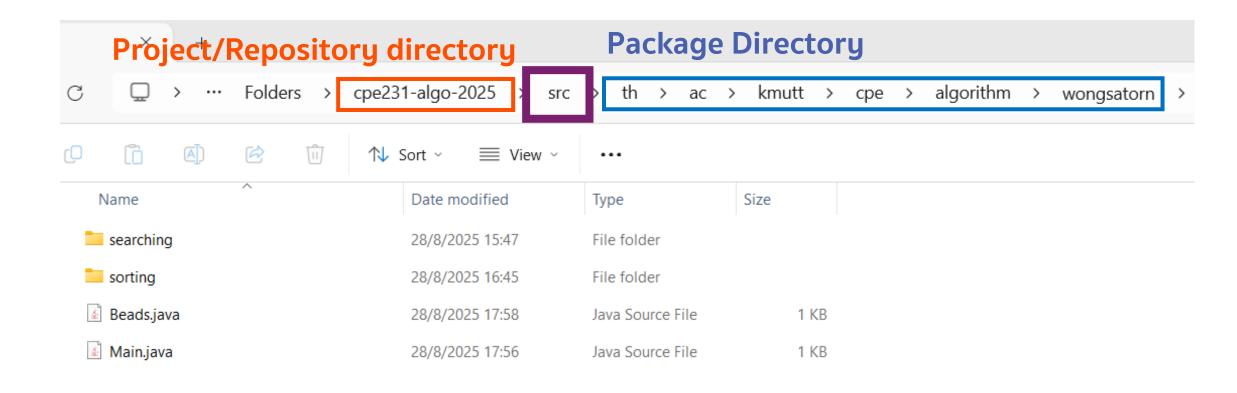
Such as,

th.ac.kmutt.cpe.algorithm.kamonnat

Your first name in all lower letter



#### Package Structure





## **Package Structure**





Containing all source file (.java)

Both folders will have the same inner folder structures



Containing all binary file (.class)



#### Create your structure

- First, create the directory structure as mentioned slide before (ONLY the src will be created, as we compile the Java source code and bin will be created automatically)
- Then open your preferred IDE (VSC, IntelliJ, Eclipse, Notepad, Vim, MS Word)

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#### Inside the package

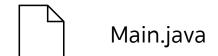




/th/ac/kmutt/cpe/algorithm/wongsatorn



/sorting th.ac.kmutt.cpe.algorithm.wongsatorn.sorting





#### How to Compile & Run this Madness!?



#### Compile

```
C:\Folders\cpe231-algo-2025>
javac -d bin -sourcepath src .\src\th\ac\kmutt\cpe\algorithm\wongsatorn\sorting\*.java
```

#### Run

```
C:\Folders\cpe231-algo-2025>
java -cp bin th.ac.kmutt.cpe.algorithm.wongsatorn.Main
```