## **Object Oriented Java - Practical Study #3**

- The objective of this practical study is to practice using packages to organize Java source files and gain skills in using Java basic statements in manipulating String and array structures.
- The requirement is to implement a class method that sorts an array of string variables in ascending order according to their length.

Please follow the instructions below:

- 1. Create the **Prac3** project for this session.
- 2. Carefully study the **strSort.java**: source file. It contains the main function that initializes a *string array* and calls a sort method (**ascendingSort**()) of another class (**sort**) to sort the array in ascending order as described above.
  - Ø Note that the **strSort** class belongs to the **StringSorting** package.
- 3. Add a new file to the package (**sort.java**) that contains a **sort** class which implements the **ascendingSort**() method used in strSort.class as shown below. This method should accept a string array (of any length), and sort its elements in ascending order.
  - Ø to add the file, use [File → New File → Java → Java Class], entering "sort" as the [Class Name] and "StringSorting" as the [Package].
  - Ø Try to use the on-line help to find more about the specifications of the **String** class. (ask your tutor about using Netbeans *intelligent-sensor* to browse class's methods and variables).
- 4. Change the **strSort** to read the array elements from the console (user input from command line) and sort the new elements.

```
//file strSort.java - exists

package StringSorting;

class strSort {

main (...

{ initialise strArray;

Create an instance of the "sort" class;

Call ascendingSort for "strArray";

print sorted array;

}

}
```

```
//file sort.java - you have to create this
package StringSorting;
class sort {

public void ascendingSort ( String sr[] )
{

....
}
....
}
```