

1 Pakiety

Packages are used to group classes. They are organized in a form of URL addresses.

```
com.pakiet.podpakiet.NazwaKlasy
```

package keyword indicates that class belongs to designated package. It must be at the start of source file:

```
package com.pakiet.podpakiet
```

Each elements divided by dots indicates the subfolder.

```
katalog/com/pakiet/podpakiet/NazwaKlasy.class
```

To use class from package we use import keyword

```
import com.pakiet.podpakiet.NazwaKlasy
```

In this example we use NazwaKlasy class from package com.pakiet.podpakiet

```
import com.pakiet.podpakiet.*
```

Using all class from com.pakiet.podpakiet.

2 Access control

Fields and methods may have access modifiers which defines range of visibility.

- public – visible everywhere
- private – visible only from own class
- protected – visible in derived classes and in package
- bez atrybutu – visible in package

3 Other modifiers

- static – Class element, do not belongs to specific object
- final – element which can not be changed

4 Tasks to complete

All task should be completed without any IDE.

1. Create example package structure with minimum 3 levels
2. Run program from selected package
3. Run program from arbitrary hard drive location
4. Test the access modifier for fields, methods and constructors
5. Test the access modifier from different package
6. Test the access modifier from derived class
7. Try to access private elements from different object of the same class
8. Use access modifiers for classes
9. Create and test access to static fields and methods
10. Test the possibilities of initializing final fields
11. Use class that is located on different hard disk location