This document contains information about laboratory exercises.

Object programming - classes 8

Subjects - Introduction to Java Programming.

1. First JAVA program.

1. Find and run Eclipse platform.
2. Set path to your workspace.
3. Create new Java Project and write *Hello world* program.
4. Run command line and go to folder where you save your project. Using *javac* compiler create *.class* files. Check your version of JAVA compiler.
5. Run file *.class* using JAVA virtual machine *java*.
6. Import to existing project all files for today laboratories.

2. Basics of java

Analize file *JavaCodeStyle.java* and its methods, pay attention to:
1. Loops : $forLoop(), breakAndContinue()$. Change the loop 'for' to *while* and *do...while*.
2. Condition : $test(), test2()$. Write code of method $test3$ that do the same as $test$ and $test2$ using operator ? :
3. Arrays : *Tablice.java*. Check what is the warning about?
4. Logic type *bool* : *bool()*. Where class Random came from ?

Differences between Java and C++:
1. Variable passing *Referencje.java*,
2. Assign *Przypisz.java*,
3. Comparing *Porownaj.java*,

Inheritance:
1. Analize the program *Dziedziczenie.java*

Encapsulation:
1. Create new package *pakiet*.
2. Inside package *pakiet* implement class A with attributes *public*, *protected*, *private* and without any access level modifier.
3. Create class B that will inherit form A and check to what fields you have access ?.
4. Create another class that inherit from A and put it in another package than A. What fields could you use know ?

3. Do it yourself tasks

1. Write a program that read command line arguments and write in order form longest to shortest and give its length.
2. Documentation page Documenatation. Page with tutorials tutorials.