

Klaudia Dziewit
Inżynieria Obliczeniowa
III rok gr. I

Rozproszona sztuczna inteligencja - ćwiczenia 1

Cel

Celem ćwiczeń było zapoznanie się ze środowiskiem pracy poprzez uruchomienie pierwszego programu za pomocą maszyny wirtualnej Javy.

Wykonanie

Sprawdziłam czy na moim komputerze zainstalowana jest maszyna wirtualna Javy. Po wpisaniu w wierszu poleceń komendy "java" uzyskałam pozytywną odpowiedź:

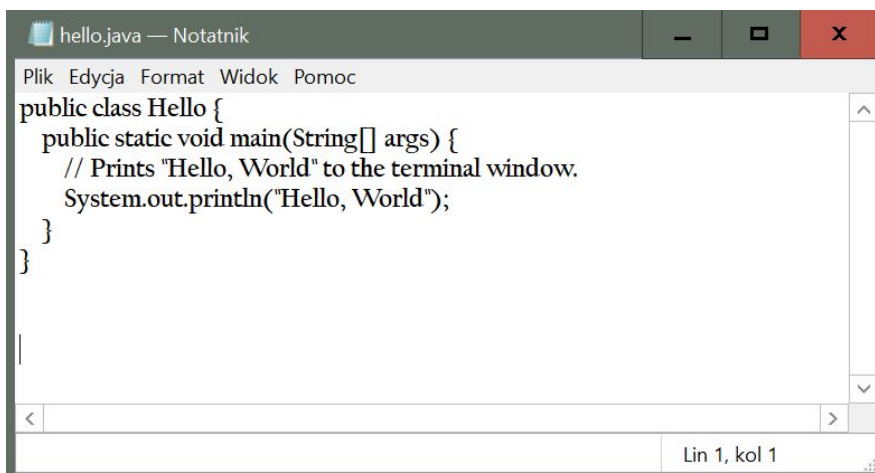
```
Usage: java [-options] class [args...]
           (to execute a class)
or java [-options] -jar jarfile [args...]
           (to execute a jar file)
where options include:
    -d32          use a 32-bit data model if available
    -d64          use a 64-bit data model if available
    -server       to select the "server" VM
                  The default VM is server.

    -cp <class search path of directories and zip/jar files>
    -classpath <class search path of directories and zip/jar files>
                  A ; separated list of directories, JAR archives,
                  and ZIP archives to search for class files.
    -D<name>=<value>
                  set a system property
    -verbose:[class|gc|jni]
                  enable verbose output
    -version      print product version and exit
    -version:<value>
                  Warning: this feature is deprecated and will be removed
                  in a future release.
                  require the specified version to run
    -showversion  print product version and continue
    -jre-restrict-search | -no-jre-restrict-search
                  Warning: this feature is deprecated and will be removed
                  in a future release.
                  include/exclude user private JREs in the version search
    -? -help     print this help message
    -X           print help on non-standard options
    -ea[:<packagename>...]:<classname>]
    -enableassertions[:<packagename>...]:<classname>]
                  enable assertions with specified granularity
    -da[:<packagename>...]:<classname>]
    -disableassertions[:<packagename>...]:<classname>]
                  disable assertions with specified granularity
    -esa | -enablesystemassertions
                  enable system assertions
    -dsa | -disablesystemassertions
                  disable system assertions
    -agentlib:<libname>[=<options>]
                  load native agent library <libname>, e.g. -agentlib:hprof
                  see also, -agentlib:jdwp=help and -agentlib:hprof=help
    -agentpath:<pathname>[=<options>]
                  load native agent library by full pathname
    -javaagent:<jarpath>[=<options>]
                  load Java programming language agent, see java.lang.instrument
    -splash:<imagepath>
                  show splash screen with specified image
See http://www.oracle.com/technetwork/java/javase/documentation/index.html for more details.
```

Następnym krokiem było sprawdzenie czy na moim komputerze zainstalowany jest kompilator Javy. W tym celu użyłam polecenia “javac” w wierszu poleceń. Ponownie uzyskałam pozytywną odpowiedź:

```
Usage: javac <options> <source files>
where possible options include:
  -g                        Generate all debugging info
  -g:none                   Generate no debugging info
  -g:{lines,vars,source}   Generate only some debugging info
  -nowarn                   Generate no warnings
  -verbose                  Output messages about what the compiler is doing
  -deprecation              Output source locations where deprecated APIs are used
  -classpath <path>        Specify where to find user class files and annotation processors
  -cp <path>                Specify where to find user class files and annotation processors
  -sourcepath <path>       Specify where to find input source files
  -bootclasspath <path>    Override location of bootstrap class files
  -extdirs <dirs>          Override location of installed extensions
  -endorseddirs <dirs>     Override location of endorsed standards path
  -proc:{none,only}        Control whether annotation processing and/or compilation is done.
  -processor <class1>[,<class2>,<class3>...] Names of the annotation processors to run; bypasses default discovery process
  -processorpath <path>    Specify where to find annotation processors
  -parameters               Generate metadata for reflection on method parameters
  -d <directory>            Specify where to place generated class files
  -s <directory>            Specify where to place generated source files
  -h <directory>            Specify where to place generated native header files
  -implicit:{none,class}   Specify whether or not to generate class files for implicitly referenced files
  -encoding <encoding>     Specify character encoding used by source files
  -source <release>         Provide source compatibility with specified release
  -target <release>         Generate class files for specific VM version
  -profile <profile>        Check that API used is available in the specified profile
  -version                  Version information
  -help                     Print a synopsis of standard options
  -Akey[=value]             Options to pass to annotation processors
  -X                        Print a synopsis of nonstandard options
  -J<flag>                  Pass <flag> directly to the runtime system
  -Werror                   Terminate compilation if warnings occur
  @<filename>               Read options and filenames from file
```

Następnie pobrałam z Internetu plik z kodem “Hello, World” w Javie. Otworzyłam go w notatniku, skompilowałam program i uruchomiłam z użyciem maszyny wirtualnej.



```
hello.java — Notatnik
Plik Edycja Format Widok Pomoc
public class Hello {
    public static void main(String[] args) {
        // Prints "Hello, World" to the terminal window.
        System.out.println("Hello, World");
    }
}

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```

```
C:\Users\klaud\java>javac Hello.java  
  
C:\Users\klaud\java>java Hello  
Hello, World
```

Ostatnim krokiem było pobranie z Internetu programu, ułatwiającego edycję kodu - Visual Studio Code. Po modyfikacji programu “Hello, World” uzyskałam następujący rezultat w terminalu:

```
C:\Users\klaud\java>java Hello  
Hello, Klaudia!
```