# Java
# Assignment 1

## Note:

1. The answer to the theory question should be submitted in a text file (DOC, DOCX, TXT, or PDF).

2. In implementing your programs, please use only those language features which have been discussed so far in the class.

3. For the programming problems, you are not expected to take inputs from user or input files etc. Simply hard-code input values in the `main` function.

## Questions:

1. Discuss the following (with examples):
   (a) Compiled and interpreted languages
   (b) Machine code and byte code
   (c) Virtual machine
   (d) WORA
   (e) Statically typed and dynamically typed languages

   (theory.doc)

2. Write a program which prints `"Hello World!"` to the console. (`Hello.java`)

3. Write a program `Dbl` which takes an integer from standard input prints its double on the standard output. (`Dbl.java`)

4. Write a function `Speak` that prints the sound of an animal (input from the standard input). If animal is `"human"`, the program prints `"bla bla bla"`; if the animal is `"dog"`, the program prints `"bark"`; and if the animal is `"cat"` then the program prints `"meow"`. Use if-else constructs. (`Speak.java`)

5. Write a Program `IterativeSumFor` that accepts an integer from the standard input and prints the value of the sum `1 + 2 + 3 + ...  + n`. Use for-loop. (IterativeSumFor.java)

6. Write a program `IterativeSumWhile` that accepts an integer from the standard input and prints the value of the sum `1 + 2 + 3 + ...  + n`. Use while-loop. (IterativeSumWhile.java)