

# Database Systems – Fall 2017

## Basic Java code

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### General Presentation

This is a simple java program, made of two files, `Demo.java` and `Rectangle.java`. To compile and execute them,

- Install Java. Hopefully the instructions at <http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html> should be clear enough.
- Open a terminal and navigate to the folder where you stored `Demo.java` and `Rectangle.java`.
- To compile our first program using **java** compiler, type

```
javac Rectangle.java
```

in Linux, or (something like)

```
"C:\Program Files (x86)\Java\jdk1.8.0_151\bin\javac" Rectangle.java
```

in Windows. We will refer to those two commands as simply `javac` in the following: you can change the path and environment variables in Windows to make it more convenient to execute java compiler. A `Rectangle.class` file will be created.

- Type

```
javac Demo.java
```

to compile your program, and then

```
java Demo
```

to execute it. You'll be asked for an integer value. Just enter an integer and hit the "enter" key.

If you have questions, feel free to reach me at [caubert@augusta.edu](mailto:caubert@augusta.edu).

## Presentation of the Programs

Those are really straightforward programs in `java`, hopefully allowing you to get familiar with this programming language. Start by reading `Demo.java`, the main purpose of those two files is to get some sense of the syntax, the overall construction will be very close to what you would do in `C#`. Playing with the code won't hurt, and here are some suggestions of exercises:

- Create an array of `String` and iterate over it,
- Read and print back a `String` from the user,
- Convert a `String` to an `int`,
- Multiply an `int` and a `double`, and store the result in a variable before printing it again,
- Create a class that extends the `Rectangle` class.