

# Constraint Programming AI Programming for Games COMP09041

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## Laboratory Objectives

### First Objective

Read Chapter 2 of “Modeling and Programming with Gecode” (MDF.pdf).

### Second Objective

Work through the simple Gecode C++ lab examples by following the instructions in the C++ code comments.

- a. Unzip the `ailab5.zip` file from myUWS (Moodle) and change into the `1_lab_examples` directory.
- b. Use CMake to create a Visual Studio solution containing the seven simple Gecode projects. For this, create a “build” directory within the `1_lab_examples` directory and use the `CMakeLists.txt` file there. There is no need to edit the `CMakeLists.txt` file as `Vcpkg` is not used.
- c. Follow the instructions at the top of each C++ file in turn.

### Third Objective

Explore the suite of example programs included with the Gecode SDK.

- a. Having unzipped the `ailab5.zip` file, we will now work with the Gecode examples. For this, create a “build” directory within the `2_gecode_examples` directory, and use the `CMakeLists.txt` file there to create a 64-bit Visual Studio solution as usual.

- b. Start by looking at the “money“ project which was covered in the lecture. Then look at the “sudoku” project, and any others which interest you.