

Compiladores - Second part of the Course Work

DCC-FCUP

November 2025

1 Deadlines

Groups are the same used for the first part of the coursework. The work must be submitted by **23:59 of the 11th of December 2025**, in the activity to be made available for this purpose on Moodle, with demonstrations carried out in the practical classes of 12 and 15 of December of 2025.

2 Submission guidelines

Each group must deliver a **.zip** file with the whole source code, and a **.pdf** file with a brief README of the project, called **README.pdf**. The submitted file must be zipped as a **.zip** file (not another archive format). The file name must be:

COMP_TP2_GRUPO_n.zip

where GRUPO_n is the name of the group (example: COMP_TP2_GRUPO_20.zip).

3 Assignment description

The goal of this second part is to implement a code generator for the same subset of Ada of the first coursework.

1. Build a symbol table with type and any other semantic information you may need in the compilation process. See the corresponding theoretical class for symbol tables as a reference.
2. Implement an intermediate code generator for the same language, which returns a list of instructions of the three address code described in the theoretical classes.
3. Implement a code generator for MIPS which, given a list of three-address instructions, prints on a file its corresponding MIPS code. MIPS code should be tested using <https://github.com/dpetersanderson/MARS>.