

Webinar 3: Code Generation

In this week's webinars we will attend to code generation from a practical perspective, and general preparation for your exam which will take place next week:

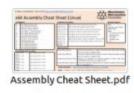
Webinar session 1: practical aspects of code generation.

Webinar session 2: exam preparation covering the full 3 weeks of material.

Session 1 (19th October):

Download calc-codegen.py and Assembly Cheat Sheet.pdf from the Moodle page.





Follow the instructions given by the tutor in the live session. We will work on the following tasks, with time for Q&A between tasks.

- **Task 1:** A little bit on assembly:
 - (a) compiling c code and generating assembly.
 - (b) writing assembly programs.
- **Task 2:** Software tour (Python3 and Antlr4). The tutor will show you how to use Antlr4 with Python to complete the relevant code generation tasks.
- **Task 3:** Discussion and analysis of Calc language and where to start, including head/body setup.
- **Task 4:** Demonstration of how to implement a code generator for a Calc <expression>.
- **Task 5:** Demonstration of how to implement a code generator for a Calc <statement>.
- **Task 6:** Discussion of lab tasks and demonstrations as time allows. The tutor will instruct how to approach the lab tasks and demonstrate how to get started.

Session 2 (23rd October):

Follow the instructions given by the tutor in the live session. We will work on the following tasks, with time for Q&A between tasks.

- **Task 1:** The tutor will discuss with you what to expect in the exam next week, w.r.t. the compilers part of the exam.
- **Task 2:** The session will now open for Q&A on anything you want more information on: exam, compiler practicals, etc...