

Compiler Construction

Supervision 1

Supervisor: Joe Isaacs (josi2).

All work should be submitted in PDF form 36 hours before the supervision to the email `josi2@cam.ac.uk`. If you have any questions on the course please include these at the top of the supervision work and we can talk about them in the supervision.

1. What sequences of translations from ‘higher-level’ to ‘lower-level’ languages do modern compilers perform? Give a broad overview.
2. For each stage give an overview of the work performed? What is the input and output from each stage.
3. <http://www.cl.cam.ac.uk/teaching/exams/pastpapers/y2004p5q7.pdf>
4. What are VMs and why are they useful?
5. What is lexical and syntactic analysis, what mathematical tools are generally used to perform these analyses?
6. <http://www.cl.cam.ac.uk/teaching/exams/pastpapers/y2004p4q1.pdf>
What is the input to the `ParseTree`, how could this be generated from a text file?
7. <http://www.cl.cam.ac.uk/teaching/exams/pastpapers/y2015p3q3.pdf>