

Compiler Construction

Supervision 2

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. <http://www.cl.cam.ac.uk/teaching/exams/pastpapers/y2005p6q5.pdf>
(a, b ,c, d and have a go at e)
2. <http://www.cl.cam.ac.uk/teaching/exams/pastpapers/y2013p3q4.pdf>
3. <http://www.cl.cam.ac.uk/teaching/exams/pastpapers/y2011p3q5.pdf>
4. <http://www.cl.cam.ac.uk/teaching/exams/pastpapers/y2016p3q4.pdf> (b and c)
5. Practical exercise: <https://www.cl.cam.ac.uk/teaching/1920/CompConstr/practical.txt>
 - (a) *Implement simple optimisations : — peephole — inline expansion — constant folding*
 - Give a single example of a peephole optimisation and implement it.
 - Inline expansion is not always a good idea, why and add a simple that can help to mitigate the problem.
 - Give the rules you are implementing for constant folding.