



Homework H8

1 Description

Write an LLVM pass starting from the code you have developed for H7.

The goal of this assignment is to exploit `loop unrolling` and/or `loop peeling` transformations, which are provided by LLVM, to increase as much as possible the number of constant propagations of CAT variables.

2 Testing your work

`H8.tar.bz2` includes some examples of C programs.

As for H7, your pass will be invoked until a fixed point is reached.

As for H7, your pass cannot save a state.

3 LLVM API and Friends

For this homework you need to use some of the new APIs used in `LLVM_loops.tar.bz2`

4 What to submit

Submit via Canvas the C++ file you've implemented (`CatPass.cpp`).

For your information: my solution for H8 added `77 lines` of C++ code to H7 (computed by `sloccount`).

Good luck with your work!