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// 15-745 S14 Assignment 3: LICodeMotion.cpp
```

```
// Group: aebtekar, auc
```

```
////////////////////////////////////
```

```
#include "llvm/IR/Function.h"
#include "llvm/Analysis/LoopPass.h"
#include "llvm/PassAnalysisSupport.h"
#include "llvm/ADT/SmallVector.h"
```

```
#include "dataflow.h"
#include "dominators.cpp"
```

```
using namespace llvm;
```

```
namespace {
```

```
class LICodeMotion : public LoopPass {
public:
    static char ID;
```

```
    LICodeMotion() : LoopPass(ID) { }
```

```
    virtual bool runOnLoop(Loop* loop, LPPassManager& lpm) {
        Dominators& dom = getAnalysis<Dominators>();
```

```
        //SmallVectorImpl<BasicBlock*> exitBlocks;
        //loop->getExitingBlocks(exitBlocks);
```

```
        // Did not modify the incoming Function.
```

```
        return false;
```

```
    }
```

```
    virtual void getAnalysisUsage(AnalysisUsage& AU) const {
        AU.setPreservesCFG();
        AU.addRequired<LoopInfo>();
        AU.addRequired<Dominators>();
    }
```

```
private:
};
```

```
char LICodeMotion::ID = 0;
```

```
RegisterPass<LICodeMotion> Y("cd-licodemotion", "15745 Loop Invariant Code Motion")
```

```
;
```

```
}
```