Assignment 6

Code Generation Part II

(Due:06/26/2014)

In programming assignment 5, we have used the parser and the type checker implemented in previous programming assignments as a base to generate real MIPS instructions for C-- programs.

Programming assignment 5 covers the basic features of code generation, including load/store instruction generation, activation record management, expression evaluation, and simple control statements. More features (as listed below) are required to be implemented in assignment #6. The source files will be released after 6/12.

* Short-circuit boolean expressions
* Variable initializations
* Procedure and function calls with parameters
* For loops
* Multiple dimensional arrays
* Implicit type conversions

PS: For variable initialization, we support only simple constant initializations, such as

Int I=1;

Float a=2.0;

PS: 10-20 extensive test cases will be posted one week before the deadline.

**Submission requirements:**

1) DO NOT change the executable name.

2) Your program should produce the output MIPS code to a file called “output.s”.  
3) Compress all the files needed to compile it. Then upload your packaged file to e3.

4) We grade the assignments on the linux1 server. Before summiting your assignment, you should make sure your version can be compiled by using “make” and works correctly on linux1.