

**17-355/17-655/17-819: Program Analysis**

**Lecture 13, Control Flow Analysis**

**In-Class Exercises**

**February 26, 2019**

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1. Use 0-CFA with constant propagation to analyze the following functional program (with location labels as superscripts):

$$((\lambda f.(f^a 3^b)c)^e (\lambda x.(x^g + 1^h)^i)^j)^k$$

You may find the following table helpful:

Variable/Label                      Lattice element                      Which rule applies?