6.035 Spring 2013

Miniquiz #11

5 minutes

For the basic block:

q = 3
r = 10
s = q + r
t = 2*r+s
t = q
u = q + r
v = q + t

w = 3 + x

State which optimization was performed on the above block to produce the following blocks. The optimization choices are:

- Copy Propagation
- Common Subexpression Elimination
- Dead Code Elimination

1. q = 3r = 10s = q + rt1 = st = 2*r+st = qu = t1v = q + tw = 3 + x2. q = 3r = 10s = q + rt = 2*r+st = qu = q + rv = q + qw = 3 + x3. q = 3r = 10s = q + rt = qu = q + r

> v = q + tw = 3 + x