Quiz Group 10 (C. Hash, K. Marino, K. Root, E. Rouse)

CS161 – Assignment #3/Quiz #5

July 10, 2012

# Q1: Write the pseudocode for what you would do to prevent these errors from occurring in your program, i.e. handle the errors before they cause a logic or runtime error?

# Arithmetic Overflow

This one is hard. Assuming you know the types of variables at play (long, int, double, etc) then you could check the result against the MAX\_VALUE.

Let’s assume they are ints.

Int a;

Int b;

<stuff happens to change a and b>

Int c = a\*b

If (c < absolute value of a or c < absolute value of b), then it overflowed. C wrapped around and became smaller than one of the operands.

# Divide by zero

Assume variables a and b.

Try:  
result = a / b

Catch (ArithmeticException):  
print “you can’t do that!”