

CS111  
Homework 4

- *The following questions may require the combine use of **if** and **while** statements.*
1. Write a program that displays all the numbers from 100 to 1,000, ten per line, that are divisible by 5 and 6. Numbers are separated by exactly one space.
  2. Write a program that:
    - a. Find the smallest integer  $n$  such that  $n^2$  is greater than 12,000.
    - b. Find the largest integer  $n$  such that  $n^3$  is less than 12,000.
  3. Write a program that reads an unspecified number of integers, determines how many positive and negative values have been read, and computes the total and average of the input values (not counting zeros). Stop reading input when user enters 0. Display the average as a double. Here is a sample run:

Enter an integer, the input ends if it is 0: 1 2 -1 3 0  
The number of positives is 3.  
The number of negatives is 1.  
The total is 5.  
The average is 1.25.