

Given: Sat Oct 29

Due: Thu Nov 3, 1 p.m.

1. (36%) Create a generic function `read(in, v)` that reads a sequence of elements from input file stream `in` and stores them in vector `v`. The original contents of the vector is deleted. The file is assumed to contain only elements separated by white space. Elements are read until the end of the file is reached. The function uses the input operator (`>>`) to read elements from the file.
2. (32%) Create a function `increment(start, stop, x)` that adds `x` to every element in the range `[start, stop)`. The arguments `start` and `stop` are bidirectional iterators.
3. (32%) Create a generic function `total({elements})` that returns the sum of all the given elements. The argument is an initializer list. The function returns 0 if the list is empty. It is assumed that 0 can be converted into a value of the same type as the elements.