Priority Queue – Wait time

**Purpose**

This lab was designed to teach you how to use a priority queue to solve a real-world problem.

**Description**

There is a queue at the bank. Your task is implementing a method to calculate the total time required for all the customers to check out.

public int waitTime(int[]customers, int n) where

customers: an array of positive integers representing the queue. Each integer represents a customer, and its value is the amount of time they require to check out.

n: a positive integer representing the number of tellers available.

And the method should return the total time taken from the first customer to when the last if finished.

**Program Shell**

Create your own.

**Sample Execution**

waitTime(new int[]{5,3,4}, 1)

// should return 12 because when there is 1 till, the total time // is just the sum of the times

waitTime(new int[]{10,2,3,3}, 2)

// should return 10

// because here n=2 and the 2nd, 3rd, and 4th people in the

// queue finish before the 1st person has finished.

waitTime(new int[]{2,3,10}, 2)

// should return 12

waitTime(new int[]{17, 2, 3, 6, 7, 8, 9, 4, 11, 22, 45, 1, 2, 3, 4, 5, 6, 7, 53, 3, 2, 34, 42, 3, 3, 4, 4}, 6)

// should return 70

waitTime (new int[]{1, 2, 54, 12, 6, 7, 8, 4, 12, 17, 2, 3, 6, 7, 8, 9, 12, 13, 11, 17, 22, 6, 5, 4, 3, 7, 8, 9, 12, 3, 4, 5, 6, 7, 15, 14, 1, 9, 8, 7, 8, 9, 8, 44, 4, 11, 22, 45, 1, 2, 3, 9, 5, 4, 3, 2, 5, 6, 7, 8, 9, 5, 5, 4, 5, 6, 7, 53, 3, 2, 34, 42, 3, 3, 4, 4}, 13)

// should return 92