PROBLEM #8:

Pizza Delivery

Description:

Panucci's Pizza is a popular pizza chain. In a certain city they actually have 2 locations. Let's call them locations **A** and **B**, each with a supply of pizzas (for this problem, assume all pizzas are the same). This sometimes presents logistical challenges. If there are **N** clients ordering pizza delivery, some are closer to location **A**, others are closer to location **B**, and others are equally distant.

Given the number of pizzas needed by each client and the distance from each client to location **A**, and to location **B**, what is the minimum total possible distance that must be traveled by the delivery boys to deliver all the pizzas, assuming they are allocated in an optimal fashion from locations **A** and **B**?

A delivery boy can deliver only one pizza at a time.

Input:

There will be several test cases in the input. Each test case will begin with a line with three integers:
N A B
Where **N** is the number of clients (**1 ≤ N ≤ 1,000**), and **A** and **B** are the number of pizzas in locations **A** and **B**, respectively (**0 ≤ A,B ≤ 10,000**). On each of the next **N** lines there will be three integers, representing information for each client:
P DA DB
Where **P** is the total number of pizzas that this client ordered, **DA** is the distance of this client from location **A**, and **DB** is this client's distance from location **B** (**0 ≤ DA,DB ≤ 1,000**). You may assume that there are enough pizzas – that is, **Σ (P's) ≤ A+B**. The input will end with a line with three **0**s

Output:

For each test case, output a single integer, representing the minimum total distance that must be traveled to deliver all of the pizzas. Count only the

outbound trip, from location **A** or location **B** to the client. Don't count the distance that a delivery boy must travel to return to location **A** or location **B**. Print each integer on its own line with no spaces. Do not print any blank lines between answers.he first line of output should be.

Sample:

Input	Output
3 15 35 10 20 10 10 10 30 10 40 10 0 0 0	300