

Problem #1 (10 marks)

Assume that two teams, A and B are facing each other at UCL semi final. The semi-final round is played in a two-legged format. That means the teams face each other twice. Once in their homeground and once in the opponent's homeground. The match that takes place in A's(or B's) home ground is called home match for A(or B) and the other match is called away match for A(or B). Now write a program where you will take as input the number of goals scored by each team in each leg and determine who is the winner of the semi-final tie. Your input will contain 4 integers. The first two integers represent A's home goals and B's away goals. The second two integers represent B's home goals and A's away goals. The team that has scored more goals than the other is the winner. In case there is a tie, the team that scored more away goals than the other is the winner.

Sample Input(s)	Corresponding Output(s)
3 0 4 0	B
3 0 4 1	A
2 0 0 0	A
2 1 1 0	B

Problem #2 (10 marks)

Assume that you want to buy some products from a shop. The shop sells only three types of products. They are chocolates, cakes and ice creams. In this problem you will be given the number of each type of items that you want to buy as well as the price of each type of items. You will have to compute the total amount you need to pay considering the following conditions.

- If you buy more than 4 chocolates you will get a 15% discount on each additional chocolate.
- If you buy more than 3 cakes you will get a 20% discount on each additional cake.
- You will get discount only one type of discount. In case of multiple possible discounts consider the one that results in minimum discount.

The input will contain 6 integers in each line. The first three integers are the number of each type of item you want to buy, the next three integers are the unit price of each type of items. Your program should output the total amount you need to pay.

Sample Input(s)	Corresponding Output(s)
1 1 1 10 15 20	45
6 1 1 10 15 20	92
1 6 1 10 15 20	111
6 6 1 10 15 20	167
6 6 6 10 15 20	267