You decide to bet on the final match of the Tug of War National Championship.

Prior to the match the names and weights of the players are presented, alternating by team (team 1 player 1, team 2 player 1, team 1 player 2, and so on). There is the same number of players on each side. You record the player weights as they are presented and calculate a total weight for each team to inform your bet. You write a C program to assist with this.

Your program should first read an integer indicating the number of members per team. Then, the program should read the player weights (integers representing kilograms) alternating by team.

After calculating the total weight of each team, the program should display the text "Team X has an advantage" (replacing X with 1 or 2 depending on which team has a greater total weight).

You will then display the text "Total weight for team 1:" followed by the weight of team 1, then "Total weight for team 2:" followed by the weight of team 2 (see example below).

You are guaranteed that the two teams will not have the same total weight.

Example

Each team is composed of four players. Those of the first weigh 110, 113, 112, and 117kg, while those of the second weigh 106, 102, 121, and 111kg. Team 1 weighs a total of 452kg whereas team 2 weighs a total of 440kg, giving team 1 an advantage.

Input

```
4

110

106

113

102

112

121

117

111
```

Output

```
Team 1 has an advantage

Total weight for team 1: 452

Total weight for team 2: 440
```

Warning: You will be graded on your output, so do not include any print statements that prompt a user for input.