The Perfect Pair Problem ID: a

The Coastal Volleyball Club is preparing for the regional championships, and Coach Marina needs to add two more players to complete her roster. However, due to strict tournament regulations and team dynamics, she must carefully consider both playing time and skill compatibility when making her selections.

Coach Marina has a list of 5 potential players to choose from. Each player has a skill rating (based on previous performance data) and a required minimum playing time they need to maintain their scholarship status. The coach needs to select exactly two players who can fulfill specific playing time requirements while maintaining reasonable skill parity to ensure smooth teamwork.

Your task is to help Coach Marina select the optimal pair of players that meets all requirements while maximizing the team's overall skill level.

Input

The input consists of three lines:

- The first line contains a single integer T representing the exact combined playing time required for the two selected players (measured in minutes)
- The second line contains five space-separated integers s_1, s_2, s_3, s_4, s_5 : the skill ratings of the available players
- The third line contains five space-separated integers p_1, p_2, p_3, p_4, p_5 : the required playing time (in minutes) for each player

Constraints

- $1 \le T \le 100$ (total required playing time)
- $1 \le s_i \le 1000$ for each player's skill rating
- $1 \le p_i \le 100$ for each player's playing time
- The selected pair must:
 - Have a combined playing time exactly equal to T minutes
 - Have skill ratings close enough to ensure effective teamwork (their skill difference must not exceed 50)
 - If multiple valid pairs exist, choose the one with the highest combined skill rating

Output

If a valid pair exists:

- First line: The maximum combined skill rating achievable
- Second line: Two space-separated integers representing the 1-based indices of the selected players
- Third line: The skill ratings and playing times of the selected players

If no valid pair exists:

• Output a single integer: -1

Sample Input 1

Sample Output 1

45	180
90 80 85 95 75	3 4
20 25 30 15 25	85 95 30 15

Sample	Input	2
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Sample Output 2

50	-1
100 200 300 400 500	
20 30 25 25 40	