CCC '23 J1 - Deliv-e-droid

Time limit: 3.0s **Memory limit:** 1G

Canadian Computing Competition: 2023 Stage 1, Junior #1

In the game, Deliv-e-droid, a robot droid has to deliver packages while avoiding obstacles. At the end of the game, the final score is calculated based on the following point system:

- Gain 50 points for every package delivered.
- Lose 10 points for every collision with an obstacle.
- Earn a bonus 500 points if the number of packages delivered is greater than the number of collisions with obstacles.

Your job is to determine the final score at the end of a game.

Input Specification

The input will consist of two lines. The first line will contain a non-negative integer P, representing the number of packages delivered. The second line will contain a non-negative integer C, representing the number of collisions with obstacles.

Output Specification

The output will consist of a single integer F, representing the final score.

Sample Input 1

5

2

Sample Output 1

730

Explanation for Sample 1

There are 5 packages delivered, so $5 \times 50 = 250$ points are gained. There are 2 collisions, so $2 \times 10 = 20$ points are lost. Since 5 > 2, a bonus 500 points are earned. Therefore, the final score is 250 - 20 + 500 = 730.

Sample Input 2

0 10

Sample Output 2

-100

Explanation for Sample 2

There are 0 packages delivered, so $0 \times 50 = 0$ points are gained. There are 10 collisions, so $10 \times 10 = 100$ points are lost. Since $0 \le 10$, no bonus points are earned. Therefore, the final score is 0 - 100 + 0 = -100.