

Darts

Problem ID: darts

Write a program, `darts.py`, which allows the user to repeatedly input the scores of two players in darts until one of them wins.

- The game is the so-called “301 darts”, which means that both players start with a score of 301 points.
- Each player then takes alternating turns at throwing their darts at the dartboard and the points scored are subtracted from the total.
- The first player to reach zero points wins the game.
- If a player scores more points in a given round than the total points remaining, then the throw is invalid and the remaining total points are not changed.
- The entered scores need to be error checked, ensuring that they are integers.
- Constants are given which you **MUST** use.

Example input/output:

```
Input points for Player 1: 180
Player 1 remaining points: 121
Input points for Player 2: 60
Player 2 remaining points: 241
Input points for Player 1: 40
Player 1 remaining points: 81
Input points for Player 2: x
Invalid input!
Input points for Player 2: y
Invalid input!
Input points for Player 2: 100
Player 2 remaining points: 141
Input points for Player 1: 21
Player 1 remaining points: 60
Input points for Player 2: 40
Player 2 remaining points: 101
Input points for Player 1: 120
Player 1 remaining points: 60
Input points for Player 2: 40
Player 2 remaining points: 61
Input points for Player 1:
Invalid input!
Input points for Player 1: 60
Player 1 remaining points: 0
Player 1 won!
```

Lines starting with “Input” are inputs, while all other lines are outputs. Here it can be seen that the total remaining points for a player are printed out in each round. Moreover, an error message is printed when the input is invalid. Finally, information about the winner is printed.

Sample Input 1

180
60
40
x
y
100
21
40
120
40

60

Sample Output 1

Input points for Player 1:
Player 1 remaining points: 121
Input points for Player 2:
Player 2 remaining points: 241
Input points for Player 1:
Player 1 remaining points: 81
Input points for Player 2:
Invalid input!
Input points for Player 2:
Invalid input!
Input points for Player 2:
Player 2 remaining points: 141
Input points for Player 1:
Player 1 remaining points: 60
Input points for Player 2:
Player 2 remaining points: 101
Input points for Player 1:
Player 1 remaining points: 60
Input points for Player 2:
Player 2 remaining points: 61
Input points for Player 1:
Invalid input!
Input points for Player 1:
Player 1 remaining points: 0
Player 1 won!