Multidimensional Arrays Evaluation Task

Instructions for students:

- **YOU CANNOT USE ANY BUILT-IN FUNCTION EXCEPT** len() **IN PYTHON. [negative indexing, append is prohibited]**
- **YOUR CODE SHOULD WORK FOR ANY 2D ARRAYS.**
- **YOU CANNOT USE ANY OTHER PYTHON COLLECTIONS EXCEPT NUMPY ARRAY (TUPLE, DICTIONARIES ETC. NOT ALLOWED)**
- **CREATE A COPY OF THE GIVEN IPYNB FILE GIVEN IN YOUR DRIVE FIRST AS CHANGES IN THE GIVEN IPYNB FILE WILL NOT BE SAVED.**

Game Arena

Suppose you and your friends are in the world of '*Alice in Borderland*' where you decided to take part in a game and entered the *game arena*. As a team, you need to gain **at least 10 points** in order to keep surviving in the borderland. Otherwise, you will be out of the game and your team will be banished for good. Now, the arena has a 2D array like structure where players of a team are given certain positions with values that are **multiples of 50**. By staying in these positions, every player can gain points from the cells above, below, left and right (not diagonally) only if those cells contain 2 [The cells containing 1s and 0s are to be avoided]. For each player, add from these cells containing 2s to your total points for the team to keep on surviving in borderland.

Note:

- **Be careful about corner cases.**
- **You do not need to check if your team got at least 10 points. That has been done in the driver code for you. You just need to return the total gained points from the gainPoints() function.**

[**Sample Input and Output given Below**]

Sample Input 1	**Sample Output 2**
---------- **| 0 | 2 | 2 | 0 |** **----------** **| 50 | 1 | 2 | 0 |** **----------** **| 2 | 2 | 2 | 0 |** **----------** **| 1 | 100 | 2 | 0 |** **----------**	**Points Gained: 6. Your team is out.**

Explanation:
Player with value 50 has 2 in the cell below him (1 cell). Player with value 100 has 2 in the cell above and in the right cell (2 cells). So in total, they got (1+2)*2 = 6 points which was not enough to survive the game.

Sample Input 1	**Sample Output 2**
---------- **| 0 | 2 | 2 | 0 | 2 |** **----------** **| 1 | 50 | 2 | 1 | 100 |** **----------** **| 2 | 2 | 2 | 0 | 2 |** **----------** **| 0 | 200 | 2 | 0 | 0 |** **----------**	**Points Gained: 14. Your team has survived the game.**

Explanation:
Player with value 50 has 2 in the cell above, cell below and the right cell (3 cells). Player with value 100 has 2 in the cell above and the cell below (2 cells). Player with value 200 has 2 in the above cell and right cell (2 cells). So in total, they gained (3+2+2)*2 = 14 points and survived the game.

Note: For the cell with value 2 that is common between 2 players in position (2,1), both gained 2 points each, so it's not like if one player already added those 2 points, another player cannot.