



Level 2: Player Statistics

Given a video = list of frames

Input:

video = {frame}

frame is defined as in level 1.

Each frame is in a separate line

The frames all have the same number of players, no players are exchanged!

Output: {playerStatistics}

playerStatistics := teamNumber playerNumber ballPosession runningDistance

ballPosession is the number of video frames the ball was less than 1.5m distance from the player

As the video resolution is in integers, these are all directly and diagonally adjoining coordinates around the player. So multiple players can have ball posession at the same time (by being near the ball).

runningDistance is the number of metres as an integer. rounding = use floating point precision during calculation, and only truncate the final result to an integer, truncate = e.g. 1.1 -> 1, 1.5 -> 1, 1.9 -> 1, 2.1 -> 2)

playerstatistics are ordered by team and player (which is the same ordering as in the video frames)

C Level 2: Example

Example with one ball and two players: ball player1 player2

Input:

```
0 0 1 1 0 1 2 1 2 2
0 0 1 1 1 2 2 1 2 2
```

Output:

```
1 1 1 1 2 1 0 0
```

Player 1 had the ball in 1 frame (in frame 1), and moved 1.41m (which is 1 when truncated to an integer), player 2 didn't have the ball, and didn't move