Instructions Project

You are given a functional basic snake game in Python developed using the Pygame library. The game works fine, but you are asked to add some new features to it. You need to get very familiar with the code, since every new functionality you add will require using the existing code. You can use any help you require, but the work has to be individual. There are several features to add that require taking some decisions, so you are free to choose how to implement them. You can add any other feature you think would be interesting, as far as they dont interfer with the req Your game should be functional.

Required features

1. Currently, the snake dies when hitting the borders of the game. You are asked to make the snake appear on the opposite side of the game when hitting the borders. For example, if the snake is going up and hits the top border, it should appear on the bottom border, still going up. (3 points)
2. Add a second type of food that increases the score by 2 rather than by 1. The food should be a different color than the regular one. This food should appear randomly but less frequently than the regular one. (3 points)
3. Add a third type of food that increases the speed of the snake by 2 during 5 seconds. The food should be a different color than the regular one. This food should appear randomly but less frequently than the regular one or the special one. (3 points)
4. Add a layout to the game. This layout consists of walls that the snake cannot cross. The layout should be a different color than the background. The layout should be a rectangle, but you can choose its size and position. (3 points)
5. Create a different layout for the game based on the difficulty. A larger difficulty should have a more complex layout. You can choose the size and position of the layout. (3 points)
6. Add a novel feature of your choice to the game. This feature should be different from the ones already implemented. You can choose any feature you want, but it should be interesting and add value to the game. Creativity will be rewarded. For example you could create portals in some parts of the layout that teleport the snake to another part of the map. (5 points)

Send the python file with the code to the email address juan.imbet@dauphine.psl.eu before December 10th 23:59 with the subject Python Project.