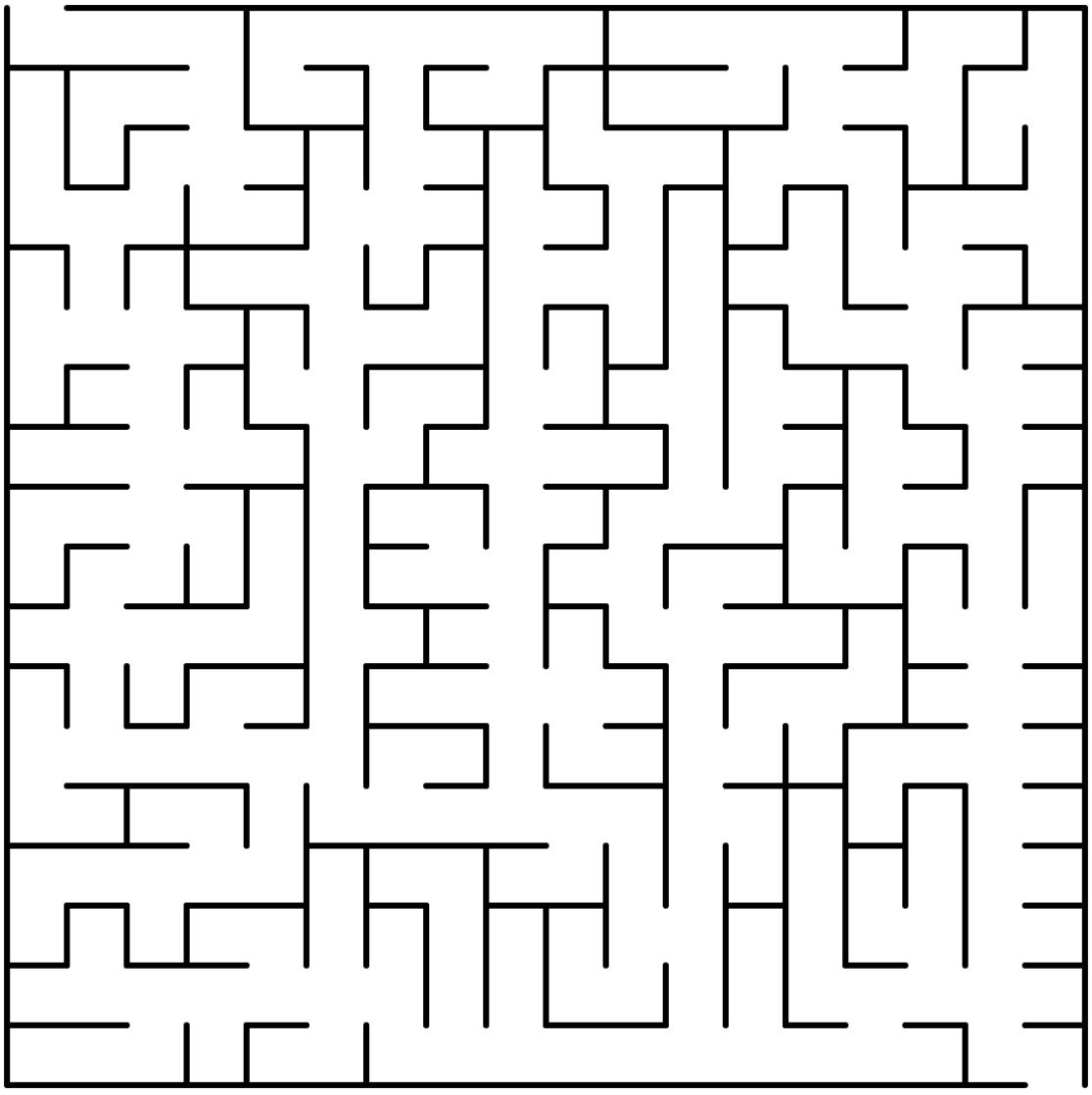
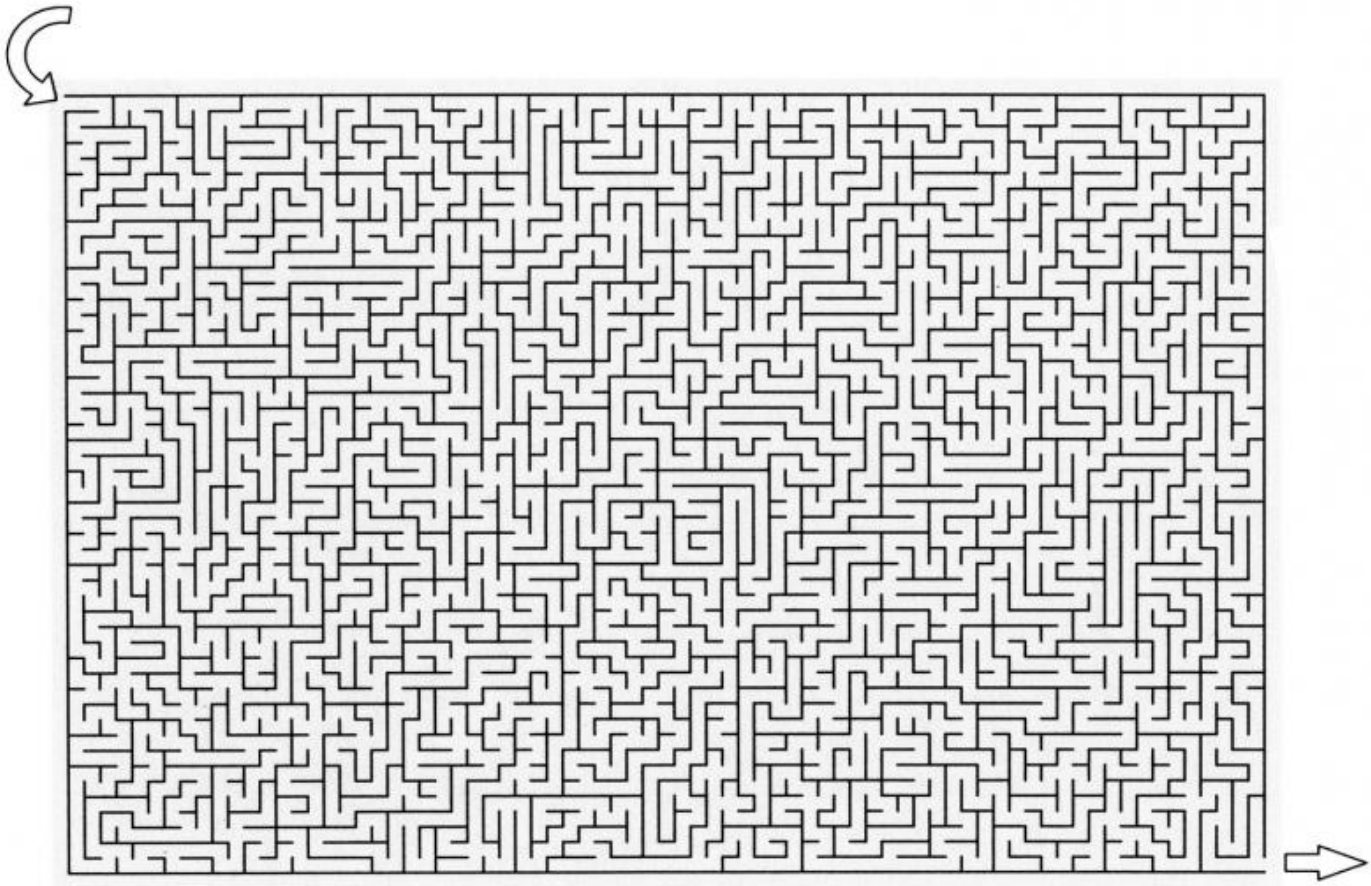
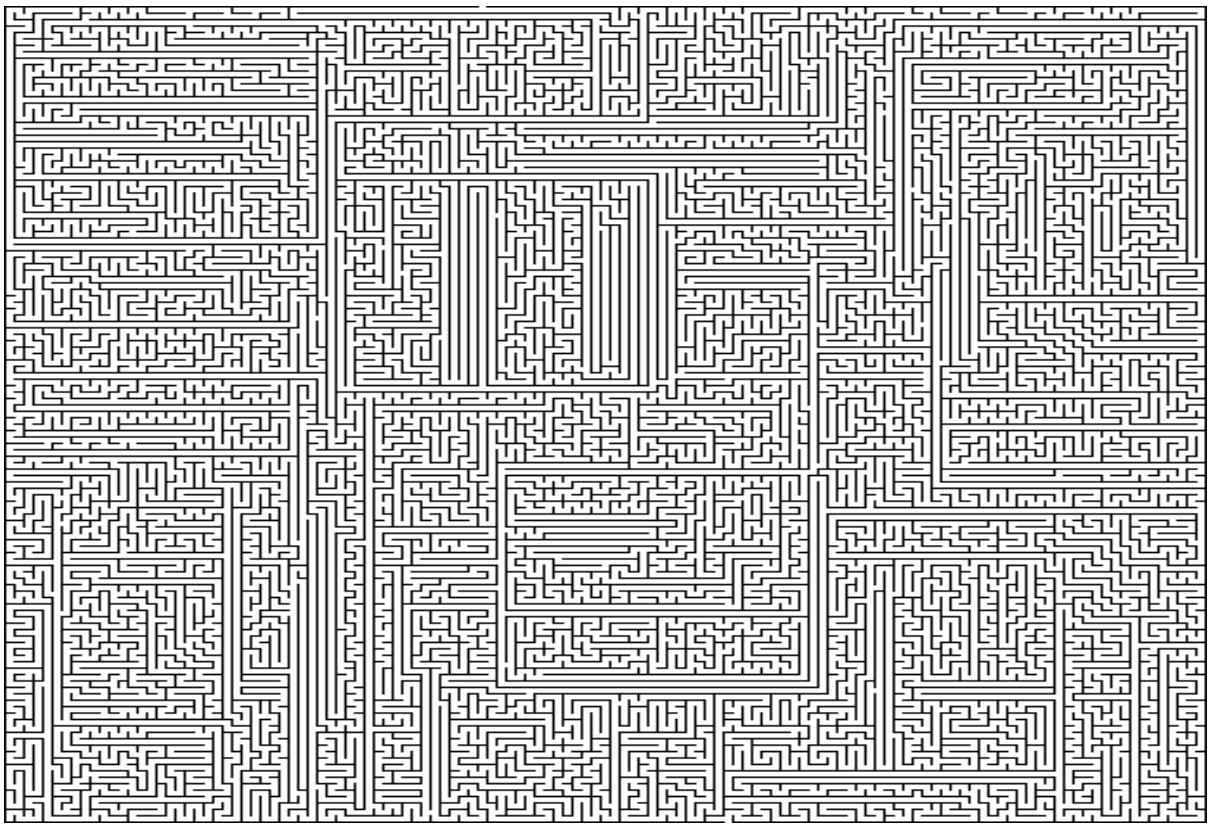
What if I say you to find the shortest path in this labyrinth,

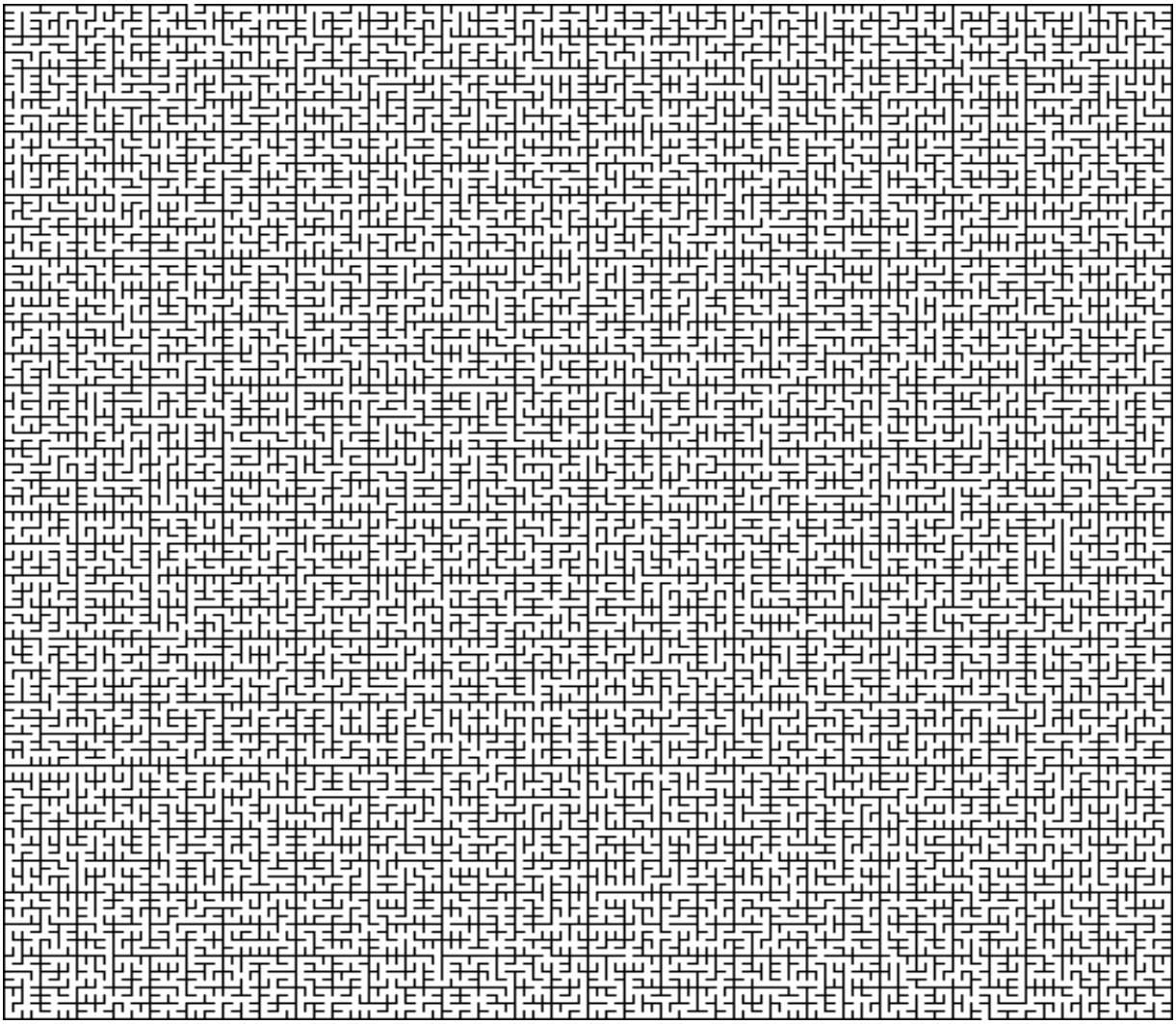
Of course you will find the path maximum about 20 sec.



But what about this image, you will waste much more hours to find the path, I don’t say the shortest path,
I think the shortest path you will not find, because of your patience))).



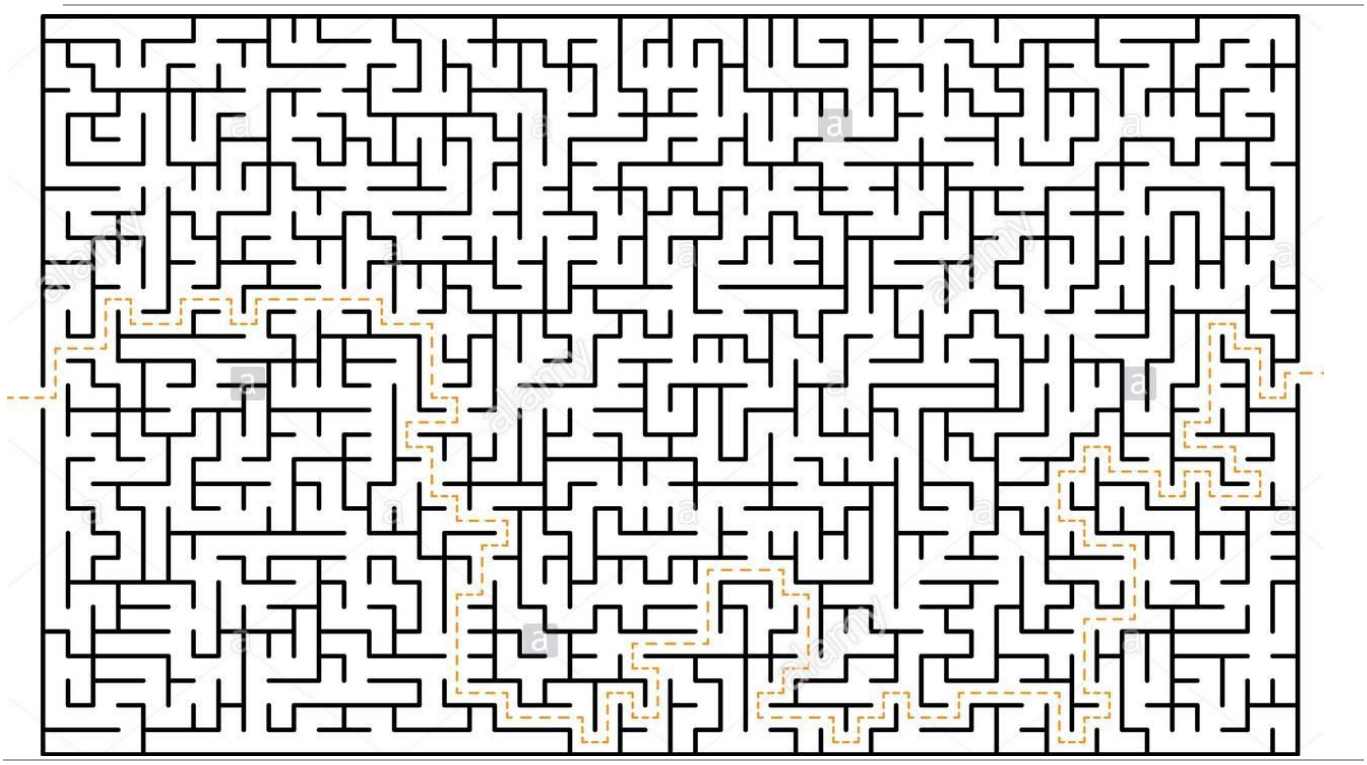




Human can’t find the shortest path in acceptable time, and in this situation we can ask computers for help.

Let's talk more about the program I will implement. The examples of the images that I mentioned are binary images consists of 0 and 1, where 0 is black color, 1 is white color.

It means we can transform our task to the task of finding the shortest path in graph theory, in which there are many algorithms to find the shortest path in graphs, for example: Dijkstra's algorithm which is the most famous. After finding the shortest path the program will draw the path.



Ok now let's talk about in which real-life problems it will help us, for example: GPS navigator ,it's also finding the shortest path between two points, and draw the path.

After solving this task that I mentioned ,I will make hard my task, for example I will implement for color images , and finding the path between 3,4 or more points.

End.