

COMIC

Title

GRAPH COLORING



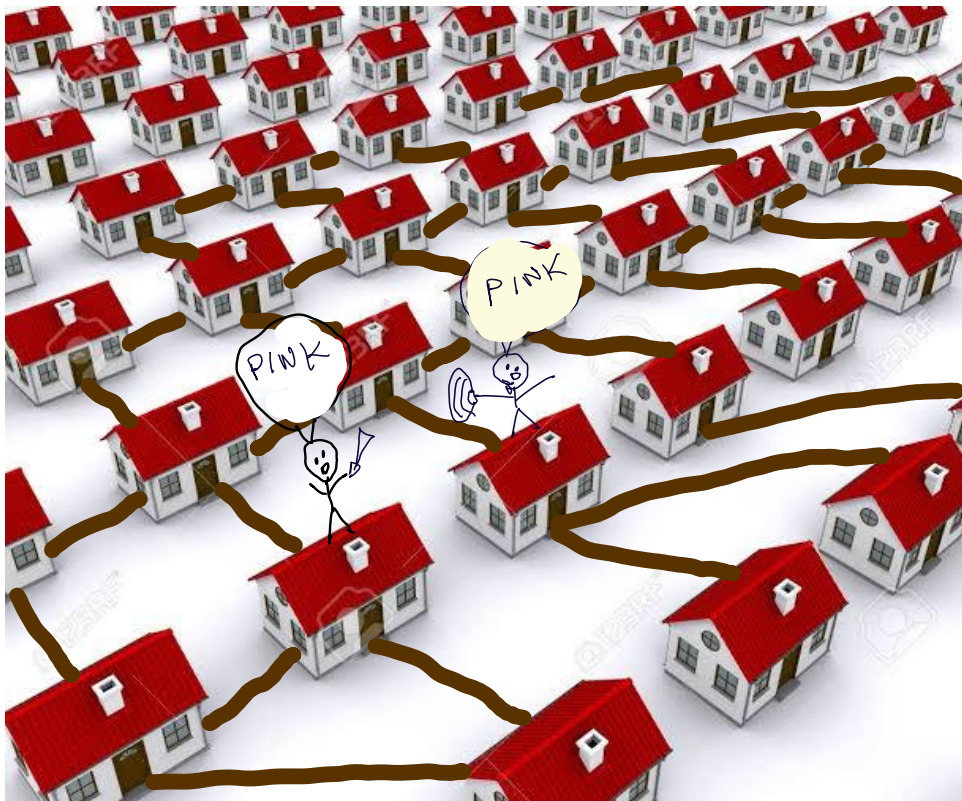
Inotes

Suppose this is a neighborhood where there are many houses which are connected to some of them via a path. Houses which are connected to each other by brown paths are called neighbors. They had an issue that whenever a guest came to their house they got confused as all houses look the same.



They wanted to color the house so that neighbor houses do not look the same. Ex: red house can not have another red house connected to it.

Confusion came while choose the colors as everyone wanted to choose a color which were conflicting with their neighbors

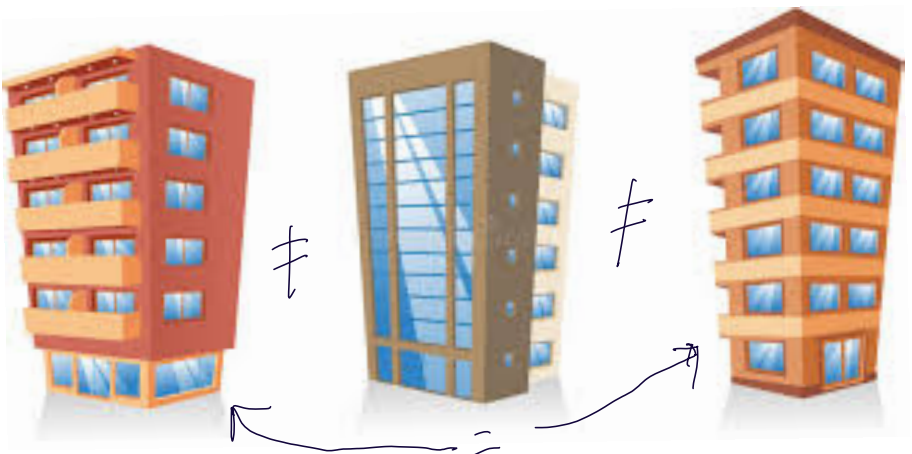


So they hired Doctor graph to solve the problem. Doctor graph has attended Prof. Dr. Sabine Storandt's algorithm engineering lecture and is ready to tackle any such problem.



Doctor graph did some geeky stuff with computer and gave each house their designated color. Now no neighboring house have the same color anymore.

Happy customer. Happy society.



Sorry, Can't tell
you, Big trade secrets.
You can take my infinity stones
but not this



Doctor is
awesome

How did
doctor do it?

yo yo

Let's go
party



Little do they know I solved the problem using graph coloring approximation solution which is super fast and is convenient to use in practice. Though the result was not optimal but why work so much while I am only getting paid 100€ for it.
Booyeahhh.



Refer to the experiment paper by Sanket Datta for more details

Now colour the vertices of the graph so that:

- No adjacent vertices are allocated the same colour
- The number of colours used is minimised

