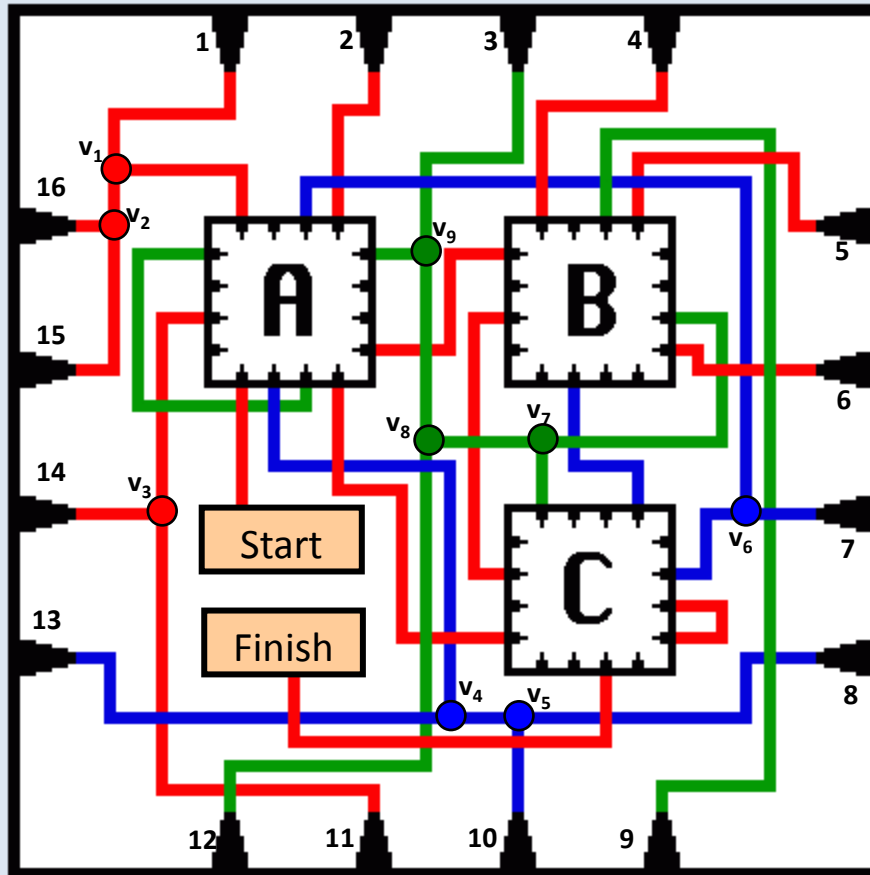# Fractal Maze



Designed by Mark J. P. Wolf.

Find a path from "Start" to "Finish".

Each smaller square is a copy of the larger square.

Note that the edges are colored only as an aid in following the paths at crossing points.

Even though there are infinitely many "Finish" lines, you need to end on the largest one at the top level.

Can you find the solution with least number of transitions? Or the solution with minimal depth?

For example, from the "Start", travel along the red edge and enter A. Inside A, you are on the green path at 12. You can travel up to vertex $v_8$. You have the option of moving to vertex $v_7$ followed by going inside C (so the stack would be AC at 1) or going inside B (stack AB at 7) or moving to vertex $v_9$ followed by going inside A (stack AA at 5) or leaving A (at 3) and entering the top level along the blue path.

# Fractal Maze Solution

| Move | Description | Stack |
|:---:|:---:|:---:|
| 1. | From "Start" enter A12 | - |
| 2. | From 12 leave 3 | A |
| 3. | From A3 enter C6 | - |
| 4. | From 6 enter B8 | C |
| 5. | From 8 enter A11 | CB |
| 6. | From 11 enter A14 | CBA |
| 7. | From 14 leave 11 | CBAA |
| 8. | From A11 leave 10 | CBA |
| 9. | From A10 enter A16 | CB |
| 10. | From 16 leave 1 | CBA |
| 11. | From A1 leave 16 | CB |
| 12. | From B16 enter A8 | C |
| 13. | From 8 enter A11 | CA |
| 14. | From 11 leave 14 | CAA |
| 15. | From A14 leave 11 | CA |
| 16. | From A11 leave 10 | C |
| 17. | From C10 go to "Finish" | - |