## Easy

| 7<br>6   | 8           | /∎t:<br>4<br>9<br>5 | 9<br>  4 | 3<br>8<br>7 | 5 |   | 1<br>3<br>4 |             | 7           |  |
|--|-------------|---------------------|----------|-------------|---|---|-------------|-------------|-------------|--|
| 3  | 7<br>4<br>2 | 1                   |          |             | 7 | - |             | 3<br>6<br>7 |             |  |
| 4<br>8<br>1  | 5<br>6<br>9 | 3<br>2<br>7         | 3        | 2<br>1<br>5 | 4 |   |             |             | 8<br>5<br>3 |  |
| Number of backtrack calls: 1 Number of backtrack failures: 0 |             |                     |          |             |   |   |             |             |             |  |

Figure 1: Solution for the easy sudoku board. The backtrack function was called only once, and there were no instances in which the backtrack function returned a failure.

TODO: [Some comments about count related to theory]

## Medium

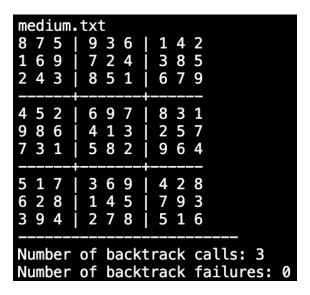


Figure 2: Solution for the medium sudoku board. The backtrack function was called a total of 3 times, and there were still no instances in which the backtrack function returned a failure.

TODO: [Some comments about count related to theory]

## Hard

| hard.txt                        |       |     |   |  |  |  |  |  |  |  |
|---------------------------------|-------|-----|---|--|--|--|--|--|--|--|
| 1 5 2                           | 3 4 6 | 8 9 | 7 |  |  |  |  |  |  |  |
| 4 3 7                           | 189   | 6 5 | 2 |  |  |  |  |  |  |  |
| 6 8 9                           | 5 7 2 | 3 1 | 4 |  |  |  |  |  |  |  |
|                                 |       | -+  |   |  |  |  |  |  |  |  |
| 8 2 1                           | 6 3 7 | 9 4 | 5 |  |  |  |  |  |  |  |
| 5 4 3                           | 891   | 7 2 | 6 |  |  |  |  |  |  |  |
| 9 7 6                           | 4 2 5 | 18  | 3 |  |  |  |  |  |  |  |
|                                 |       | -+  |   |  |  |  |  |  |  |  |
| 7 9 8                           | 2 5 3 | 4 6 | 1 |  |  |  |  |  |  |  |
| 3 6 5                           | 914   | 2 7 | 8 |  |  |  |  |  |  |  |
| 2 1 4                           | 768   | 5 3 | 9 |  |  |  |  |  |  |  |
|                                 |       |     |   |  |  |  |  |  |  |  |
| Number of backtrack calls: 12   |       |     |   |  |  |  |  |  |  |  |
| Number of backtrack failures: 4 |       |     |   |  |  |  |  |  |  |  |

Figure 3: Solution for the hard sudoku board. The backtrack function was called a total of 12 times, and there were 4 instances in which the function returned a failure.

TODO: [Some comments about count related to theory]

## Very hard

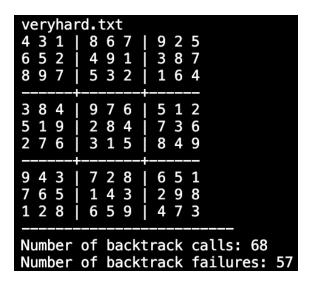


Figure 4: Solution for the very hard sudoku board. In this solution, the backtrack function was called a total of 68 times, and a total of 57 failures were returned.

TODO: [Some comments about count related to theory]