

Assignment 4 – Sudoku solver

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Sudoku board: **EASY**

```
7 8 4 | 9 3 2 | 1 5 6
6 1 9 | 4 8 5 | 3 2 7
2 3 5 | 1 7 6 | 4 8 9
-----+-----+-----
```

```
5 7 8 | 2 6 1 | 9 3 4
3 4 1 | 8 9 7 | 5 6 2
9 2 6 | 5 4 3 | 8 7 1
-----+-----+-----
```

```
4 5 3 | 7 2 9 | 6 1 8
8 6 2 | 3 1 4 | 7 9 5
1 9 7 | 6 5 8 | 2 4 3
```

* backtrack() was called 1 times.

* backtrack() failed 0 times.

Sudoku board: **MEDIUM**

```
8 7 5 | 9 3 6 | 1 4 2
1 6 9 | 7 2 4 | 3 8 5
2 4 3 | 8 5 1 | 6 7 9
-----+-----+-----
```

```
4 5 2 | 6 9 7 | 8 3 1
9 8 6 | 4 1 3 | 2 5 7
7 3 1 | 5 8 2 | 9 6 4
-----+-----+-----
```

```
5 1 7 | 3 6 9 | 4 2 8
6 2 8 | 1 4 5 | 7 9 3
3 9 4 | 2 7 8 | 5 1 6
```

* backtrack() was called 1 times.

* backtrack() failed 0 times.

Sudoku board: **HARD**

```
1 5 2 | 3 4 6 | 8 9 7
4 3 7 | 1 8 9 | 6 5 2
6 8 9 | 5 7 2 | 3 1 4
-----+-----+-----
```

```
8 2 1 | 6 3 7 | 9 4 5
5 4 3 | 8 9 1 | 7 2 6
9 7 6 | 4 2 5 | 1 8 3
-----+-----+-----
```

```
7 9 8 | 2 5 3 | 4 6 1
3 6 5 | 9 1 4 | 2 7 8
2 1 4 | 7 6 8 | 5 3 9
```

* backtrack() was called 1 times.

* backtrack() failed 3 times.

Sudoku board: **VERYHARD**

4	3	1		8	6	7		9	2	5
6	5	2		4	9	1		3	8	7
8	9	7		5	3	2		1	6	4

-----+-----+-----

3	8	4		9	7	6		5	1	2
5	1	9		2	8	4		7	3	6
2	7	6		3	1	5		8	4	9

-----+-----+-----

9	4	3		7	2	8		6	5	1
7	6	5		1	4	3		2	9	8
1	2	8		6	5	9		4	7	3

* backtrack() was called 1 times.

* backtrack() failed 27 times.