

N-Queens Problem using hill climbing approach

Enter the number of queens

8

Enter the number of trials you want to want to try the algorithms

1

#Trail 1

* * * * *

Q Q * * * * *

* * * * *

* * * * *

* * * * *

* * Q * * * Q *

* * * Q Q * * *

* * * * * Q * Q

The heuristic value of the original board is : 7

Better board found at column 0 with heuristic : 7

* * * * *

Q Q * * * * *

* * * * *

* * * * *

* * * * *

* * Q * * * Q *

* * * Q Q * * *

* * * * * Q * Q

Better board found at column 0 with heuristic : 6

* * * * *

* Q * * * * *

* * * * *

* * * * *

Q * * * * *

* * Q * * * Q *

* * * Q Q * * *

* * * * * Q * Q

Better board found at column 1 with heuristic : 6

* Q * * * * *

* * * * *

* * * * *

* * * * *

Q * * * * *

* * Q * * * Q *

* * * Q Q * * *

* * * * * Q * Q

Better board found at column 1 with heuristic : 6

* * * * *

* Q * * * * *

* * * * *

* * * * *

Q * * * * *

* * Q * * * Q *

* * * Q Q * * *

* * * * * Q * Q

Better board found at column 1 with heuristic : 5

```
* * * * *
* * * * *
* Q * * * *
* * * * *
Q * * * * *
* * Q * * * Q *
* * * Q Q * * *
* * * * * Q * Q
```

Better board found at column 2 with heuristic : 3

```
* * Q * * * *
* * * * *
* Q * * * * *
* * * * *
Q * * * * *
* * * * * Q *
* * * Q Q * * *
* * * * * Q * Q
```

Better board found at column 3 with heuristic : 3

```
* * Q * * * *
* * * * *
* Q * * * * *
* * * Q * * *
Q * * * * *
* * * * * Q *
* * * * Q * * *
* * * * * Q * Q
```

Better board found at column 3 with heuristic : 3

```
* * Q * * * *
* * * * *
* Q * * * * *
* * * * *
Q * * * * *
* * * * * Q *
* * * Q Q * * *
* * * * * Q * Q
```

Better board found at column 4 with heuristic : 3

```
* * Q * Q * *
* * * * *
* Q * * * * *
* * * * *
Q * * * * *
* * * * * Q *
* * * Q * * *
* * * * * Q * Q
```

Better board found at column 4 with heuristic : 1

```
* * Q * * * *
* * * * Q * *
* Q * * * * *
* * * * *
Q * * * * *
* * * * * Q *
* * * Q * * *
```

* * * * * Q * Q

Better board found at column 5 with heuristic : 1

* * Q * * * * *

* * * * Q Q * *

* Q * * * * * *

* * * * * * * *

Q * * * * * * *

* * * * * * Q *

* * * Q * * * *

* * * * * * * Q

Better board found at column 5 with heuristic : 1

* * Q * * * * *

* * * * Q * * *

* Q * * * * * *

* * * * * Q * *

Q * * * * * * *

* * * * * * Q *

* * * Q * * * *

* * * * * * * Q

Better board found at column 5 with heuristic : 1

* * Q * * * * *

* * * * Q * * *

* Q * * * * * *

* * * * * * * *

Q * * * * * * *

* * * * * * Q *

* * * Q * * * *

* * * * * Q * Q

Better board found at column 6 with heuristic : 1

* * Q * * * * *

* * * * Q * * *

* Q * * * * * *

* * * * * * * *

Q * * * * * * *

* * * * * * Q *

* * * Q * * * *

* * * * * Q * Q

Better board found at column 7 with heuristic : 1

* * Q * * * * Q

* * * * Q * * *

* Q * * * * * *

* * * * * * * *

Q * * * * * * *

* * * * * * Q *

* * * Q * * * *

* * * * * Q * *

Better board found at column 7 with heuristic : 1

* * Q * * * * *

* * * * Q * * Q

* Q * * * * * *

* * * * * * * *

Q * * * * * * *

```
* * * * * Q *
* * * Q * * *
* * * * * Q * *
```

Better board found at column 7 with heuristic : 0

```
* * Q * * * *
* * * * Q * *
* Q * * * * *
* * * * * * Q
Q * * * * *
* * * * * Q *
* * * Q * * *
* * * * * Q * *
```

Solution found

```
* * Q * * * *
* * * * Q * *
* Q * * * * *
* * * * * * Q
Q * * * * *
* * * * * Q *
* * * Q * * *
* * * * * Q * *
```