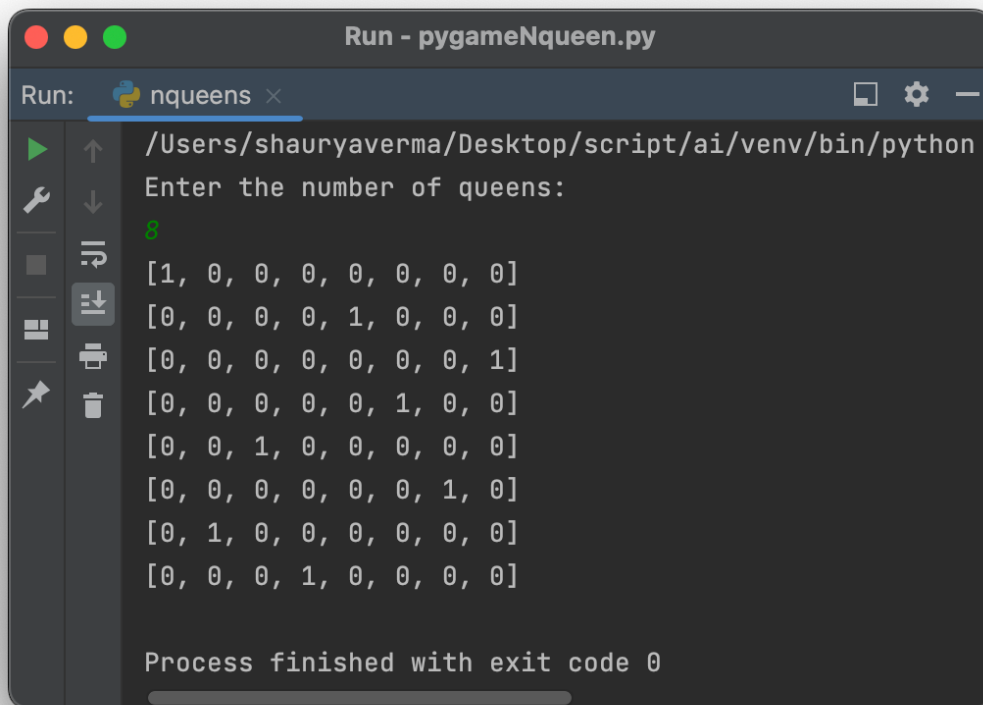


This solves the famous problem of N Queens on a chessboard using backtracking method.

Problem: Place “N” queens on a N x N chessboard such that no two queens attack each other.

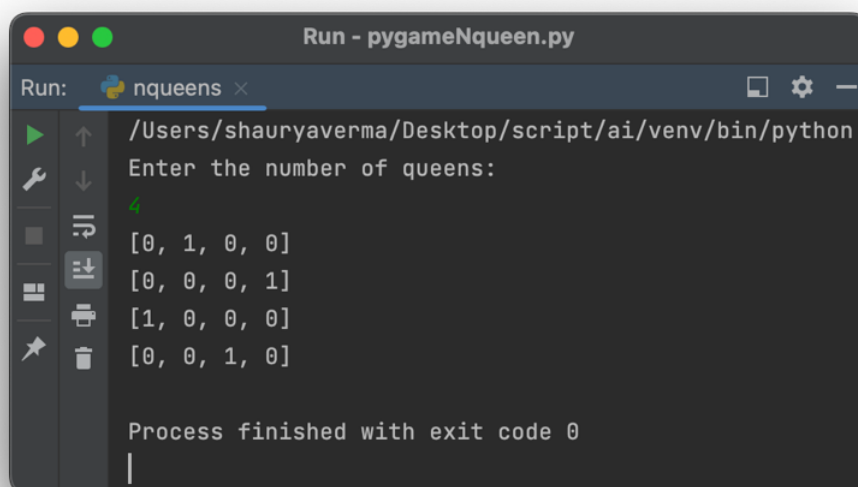
Keep in consideration, since this uses backtracking approach, the time complexity is too large for large inputs (high number of queens), this project is to display the n-queens problem using a specific approach.

For larger inputs and a better for efficient result, refer the “4Queens” problem in this same repository which solves the problem using BFS (Breadth-First Search). Configure the dimensions of the chessboard and the number of queens internally accordingly.



```
Run - pygameNqueen.py
Run: nqueens x
/Users/shauryaverma/Desktop/script/ai/venv/bin/python
Enter the number of queens:
8
[1, 0, 0, 0, 0, 0, 0, 0]
[0, 0, 0, 0, 1, 0, 0, 0]
[0, 0, 0, 0, 0, 0, 0, 1]
[0, 0, 0, 0, 0, 1, 0, 0]
[0, 0, 1, 0, 0, 0, 0, 0]
[0, 0, 0, 0, 0, 0, 1, 0]
[0, 1, 0, 0, 0, 0, 0, 0]
[0, 0, 0, 1, 0, 0, 0, 0]

Process finished with exit code 0
```



```
Run - pygameNqueen.py
Run: nqueens x
/Users/shauryaverma/Desktop/script/ai/venv/bin/python
Enter the number of queens:
4
[0, 1, 0, 0]
[0, 0, 0, 1]
[1, 0, 0, 0]
[0, 0, 1, 0]

Process finished with exit code 0
|
```

Happy Coding!