**Aim:**

To implement the **8 Queen Algorithm** in Python.

**CODE:**

**def is\_safe(board, row, col):**

**for i in range(row):**

**if board[i] == col or \**

**board[i] - i == col - row or \**

**board[i] + i == col + row:**

**return False**

**return True**

**def solve(board, row):**

**if row == 8:**

**print\_board(board)**

**return True**

**for col in range(8):**

**if is\_safe(board, row, col):**

**board[row] = col**

**if solve(board, row + 1):**

**return True**

**board[row] = -1**

**return False**

**def print\_board(board):**

**for i in range(8):**

**row = ['Q' if board[i] == j else '.' for j in range(8)]**

**print(' '.join(row))**

**print("\n" + "-"\*20)**

**board = [-1] \* 8**

**solve(board, 0)**

**RESULT:**

**The 8 Queen program was successfully implemented.**