```
def print solution(board):
 for row in board:
 print(" ".join(str(cell) for cell in row))
 print()
def is safe(board, row, col, n):
 for i in range(row):
 if board[i][col] == 1:
  return False
 i, j = row, col
 while i \ge 0 and j \ge 0:
 if board[i][j] == 1:
  return False
 i = 1
 j = 1
 i, j = row, col
 while i \ge 0 and j < n:
 if board[i][j] == 1:
  return False
 i = 1
 j += 1
 return True
def solve n queens(board, row, n):
if row \geq = n:
 print("Solution:")
 print solution(board)
 return True
for col in range(n):
 if is safe(board, row, col, n):
 board[row][col] = 1
 if solve n queens(board, row + 1, n):
  return True
 board[row][col] = 0
return False
def n queens with first queen placed(n, first row, first col):
 board = [[0 \text{ for } in \text{ range}(n)] \text{ for } in \text{ range}(n)]
 board[first row][first col] = 1
 if solve n queens(board, 0, n):
 return
 board[first row][first col] = 0
 for row in range(n):
 for col in range(n):
  board[row][col] = 1
  if solve n queens(board, row + 1, n):
  return
  board[row][col] = 0
 print("No solution exists for this configuration.")
def main():
n = int(input("Enter the value of N for the NxN board: "))
first row = int(input("Enter the row index (0-based) for the first queen: "))
```

```
first_col = int(input("Enter the column index (0-based) for the first queen: "))
print(f"Initial board with the first queen placed at ({first_row}, {first_col}):")
n_queens_with_first_queen_placed(n, first_row, first_col)
main()
```

output:

Enter the value of N for the NxN board: 4 Enter the row index (0-based) for the first queen: 2 Enter the column index (0-based) for the first queen: 2 Initial board with the first queen placed at (2, 2): Solution:

0100

0001

1000

0010