## Quiz8:

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([Test cases](#_Test Case:) are on the 2nd page.)

**Program Description:**

I implemented algorithm 5.1 on the text book. There are the variables and functions in my program.

int n; // The number of the queens.

int[] col; // An array of size n, col[i] stands for which column the ith row's queens is on.

int numOfSolutions // The number of the solutions of n queens.

public int abs(int x)

This function is to calculate the absolute value.

Input: int x.

Output: the absolute value of x.

public boolean promising(int i)

The promising function.  
Input: the index of row: i.  
Output: whether the candidate sub-solution on ith row is promising.

public void queens(int v)

The core function that implement algorithm 5.1. The top-level call should be queens(0).

public void reset()

This function is to reset the numOfSolutions back to 0 when we change the number of the queens.

# Test Case:

