

## Programming Assignment #2

# n-Queen Problem

Due: 11/22 23:58

## Problem Description

Implement an algorithm **using BFS** that takes an integer  $N$  as input and determines the number of solutions to the n-Queen problem.

## I/O Format

Use standard output(stdout) as output, `argv[1]` as input.

Execution example:

```
$/106062000_bonus2 8
```

```
92
```

```
$
```

( $N$  is imported through `argv[1]`)

### Input

For all of the test cases,  $N \geq 8$ .

### Output

Output the number of solutions to the n-Queen problem.

Remember to output a newline character after the number.

## Program Submission

1. Please use C/C++ and write your program in a single source file.
2. Your source file must be named as "<Student\_ID>\_bonus2.cpp" and please make sure that all characters of the filename are in lower case. For example, if your student id is 106062000, the name of your program file should be 106062000\_bonus2.cpp

## Grading Policy

- Test cases  
100%