

CS 471 Senior Capstone I, Fall 2024

Code Review Activity #1

This activity is to be done in a small group. It deals with the C++ source file `solve.cpp`, which is in the class Git repository.

Checklist

Local Coding Standards

- Does the code adhere to reasonable, consistent conventions for indentation, spacing, etc.?
- Are the imports that are done exactly those that are needed?
- [C++] Are namespaces (`std::`, etc.) handled correctly?

General Good Practices

- Is the code readable?
- Are identifiers (names of classes, functions, variables) well chosen?
- Are there any unsafe, unnecessarily inefficient, or generally poor practices in the code?

Suitability for Intended Use

- Is the overall organization and purpose of the code clear and easy to understand?
- Is the code sensibly divided into components? Do the functions perform clear, reasonable, well chosen tasks?
- Is the code suitable for the task it is intended to perform?

Other

- Is there anything else you want to point out?

Procedures

Using the above checklist, do a code review of the file. Base this on the following note from the author.

Author's Note

Files modified: `solve.cpp` (new file).

I put up a solution in brute for algorithm for this problem from codechef.

Given some number K and a list of N numbers, count the number of pairs (i, j) such that $1 \leq i < j \leq N$ and $|a_i - a_j| \geq K$

- $1 \leq N \leq 65000$
- $1 \leq K \leq 108$
- $0 \leq a_i \leq 108$