Lab 4

Direction: Submit the typed source code or git url. All tasks must be completed. Each team member is required to do at least 1 task. And no group can exceed 4 members

Towers Of Hanoi

For this lab, you will define some methods of the class **TowersOfHanoi**. It has only one field which is a **Tower** array of three elements. Make sure to study the header file "Archive.h" before proceeding.

Your group will have to rewrite the given method so that they perform their descriptions correctly.

I. The header file "Copy.h" contains the class **TowersOfHanoi** methods

- Public copy constructor that performs a shallow copy.
- Public overloaded assignment operator that performs a shallow copy.

II. The header file "Move.h" contains the class **TowersOfHanoi** method

- Public bool method named `Move()` that takes two int parameters named *from* and *to* respectively. It returns true if *from* and *to* are both between 0 and 2 inclusively, *towers* whose index is *from* is not empty, and the top of *towers* whose index is *from* can be added to *towers* whose index is *to*; otherwise, it return false. If it returns true, the actual move must occur.

III. The header file "Reset.h" contains the class **TowersOfHanoi** method

- Public void method named `Reset()` that takes no parameters. It resets *towers* to their original configuration.

IV. The header file "Success.h" contains the class **TowersOfHanoi** method

- Public bool constant method named `Success()` that takes no parameters. It retruns true if *towers* whose index is 2 is the only none empty tower.