**Program details:**

1. Program supports a **Long** range of values including **negative** values. But current build is configured to support 0 to Integer.MAX\_VALUE.
2. Program assumes that user may choose a number that system does not support. So initially checks if the user chose a valid number that system supports. (This helps informing the user upfront rather than later in the game.)
3. Program guesses the number using binary search. So the maximum number of questions asked to guess the number is log(n)+2, n being size of number range that system supports. 2 being the initial checks to see if user chose in supported range.
4. User interaction issues like

* Typing command with leading, trailing spaces
* Typing command in upper/lower/mixed case.
* Typing Illegal command

are handled appropriately.

1. Program allows user to **retype** the mistyped/Illegal command for a configurable number of times.
2. User may respond with a wrong answer at some point. Like

Is the number 7? Lower.

In this case program cannot guess the number. So user is informed about the wrong answer

"Cannot guess the number. Incorrect response for one of the questions."

1. Project is built on Maven.
2. Program is tested using various test cases by mocking user input. **All Junit test cases passed in IDE**. But in maven build the test cases are failing due to timing issues.

**How to run:**

1. In command prompt, move to the path where **college.board.assignment.jar** is present
2. Execute the following command **Java –jar college.board.assignment.jar**