

Lab 08 - Dynamic Memory

Direction: Submit your typed work(s) as an upload(s) to the Labs directory of your GitHub repository or Dropbox, or in your correct Lab08 google classroom assignment. The file should be named "lab8B.cpp".

Part B: Take home

Your objective is to write the definition of the function `GuessNumber()` whose header is

```
bool GuessNumber(int lo,int hi,unsigned int attempts)
```

If the inclusive range of *lo* and *hi* is at least 20, the function selects a random number between *lo* and *hi* inclusively. Afterwards, it prompts the user to guess the random number until the user either guesses the number or runs out of attempts which equals the value of *attempts*. A guess only qualifies as an attempt if the number is within the range of *lo* and *hi* inclusively and it has not been guessed before. If the user guesses the number before running out of attempts, the function displays the message "Congratulations!"; otherwise, it displays the message "Better Luck Next Time!". And then, it returns true. Likewise, if *attempts* is equal to or more than the inclusive range of *lo* and *hi*, it is assigned half the inclusive range of *lo* and *hi*. Furthermore, if the inclusive range of *lo* and *hi* is less than 20, the function only returns false. Do not assume that *lo* is less than *hi*.

Note: To generate a random number use the `rand()` function from the `cstdlib` library