## C Language Programming: Homework #3 Assigned on 10/08/2019(Tuesday), Due on 10/15/2019(Tuesday)

This program allows you to play a game called *master mind*. You have to do the following:

- 1. Define (input)
  - (a) the number of integers (N) to play with. For example, N = 5 means you like to play with 5 numbers which is 1 to 5,
  - (b) the number of positions (P). For example, P = 4 means you have 4 positions to put 4 integers, such as  $(1\ 2\ 3\ 4)$  that users like to guess.
  - (c) both **N** and **P** are input from command argument list.
- 2. (10%)Generate a senquence of P numbers as the hidden number sequence which cannot be seen by the player.(use random function to generate your senquence)
- 3. (50%)Let user input his guesses. Your program process the input guesses one by one behind the screen by the following rules: If both the position and number are the same as a hidden number, the program prompts an H and if only the number is the same as a hidden number, it prompts an X. For example,
  - 1 2 3 4 (hidden from player)
  - 1331 (player's guess)  $\rightarrow$  2 H and 2 X
  - 1 3 5 1 (player's guess)  $\rightarrow$  1 H and 2 X
- 4. (40%)Write loop let user input his guesses until his guesses are correct.
- 5. updata your report to server, otherwise you will get -10 point.
- 6.If you will not submit your report, you get 0 point.

Note: <a href="https://www.geeksforgeeks.org/clear-console-c-language/">https://www.geeksforgeeks.org/clear-console-c-language/</a>

Command Line(You must use Parameter argc and argv) ./hw3 N P(Please Follow this Sequence, otherwise you will get -20 point)

## Example

>./hw3 5 4

Guess: 1 3 3 1

2H2X

Guess: 1 3 5 1

1H2X

Guess: 1 2 3 4

Correct