Step 1:

* What are the user inputs?
  + The user will input the coordinates for the attack, where the ships will be positioned, and the choice between the computer or 2 player game
* What are the program outputs?
  + The program will output the requests for the input and the game status.
* What assumptions are you making about the user input?
  + The user will input whatever the program asks the way its asked. Example: If the program asks for rows and the user inputs ‘a’, there will be an error message.
* What are all the tasks and subtasks in this problem?
  + The program will request the user to input if the user wants to play with another player or with the computer, then ask the user to input the desired locations of the ships and print the game. The program then will ask the user to input the coordinates for the attack and show the outcome.

Step 2:

Start

Computer or 2 Player

Computer

2-Player

Choose and place ships

Get Ships

Display game

Request Attack

Computer Attack

Display game

Do

While

Not all ships destroyed

Print Winner

Step 3:

|  |  |  |
| --- | --- | --- |
| Input | Behavior | Met Expectations? |
| Any letter for columns | Valid |  |
| Any int for rows | Valid |  |
| Any combination of letter and int for rows/col | Valid |  |