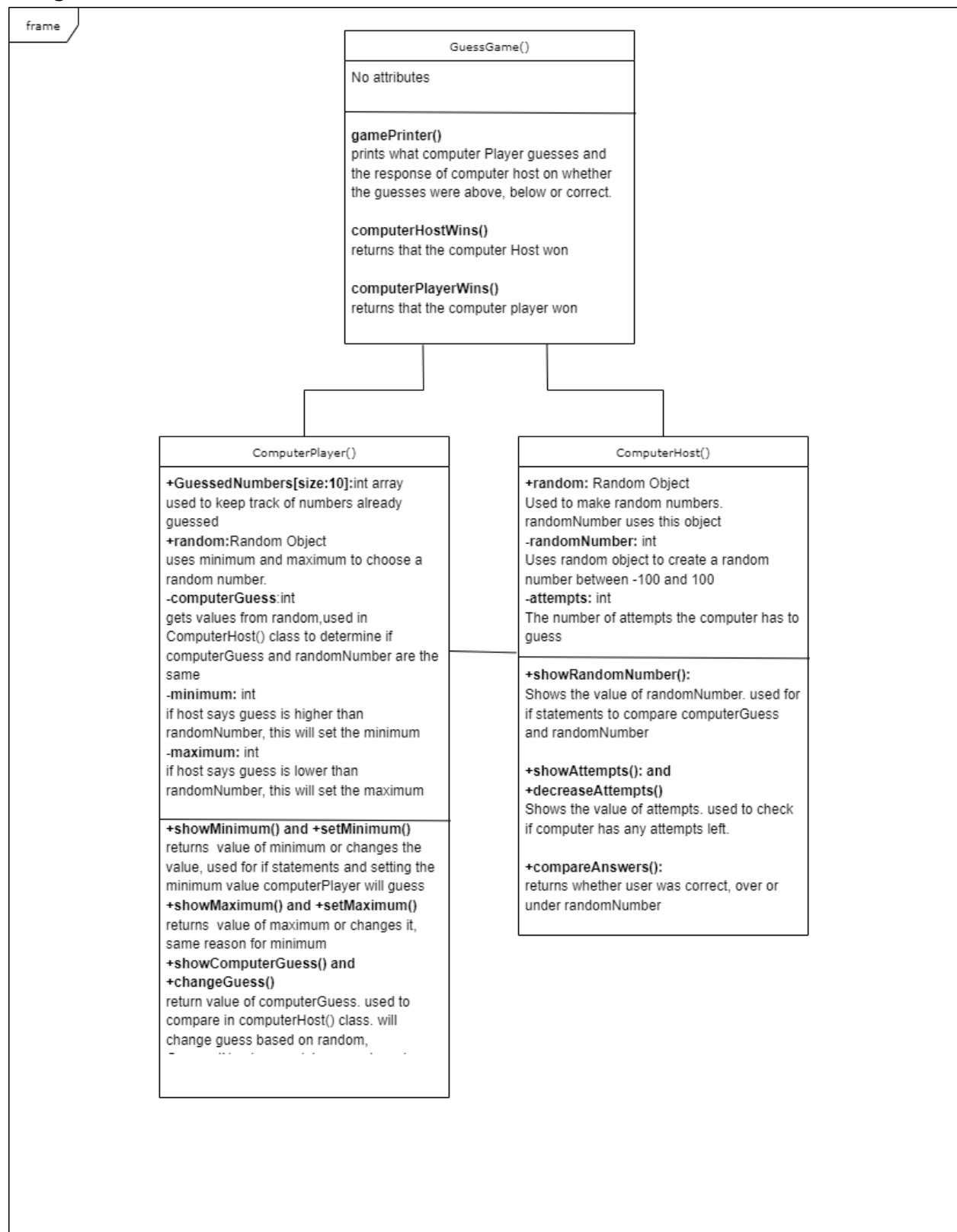


### Assignment03-Q3:

PhoneNumber()
<p><b>+reader:</b> Scanner Object: Used to take in user input</p> <p><b>+userNumber:</b> String: Stores user input and is the filtered version of unfilteredUserNumber. It has a strict format</p> <p><b>+unfilteredUserNumber:</b> String Is the unfiltered version of userNumber, this takes the input from system.in and is eventually trimmed and made lowercase for easier if manipulation</p> <p><b>+pass:</b> boolean Is used for while loop and to ensure the user is inputting the correct format.</p> <p><b>+userNumberIndex:</b> String Is the individual characters of userNumber, it is used for comparisons so that if the character is a letter, it can be changed to its number counter part.</p>
<p><b>+convertNumber</b> <b>(userNumber,unfilteredUserNumber):</b> takes in 2 parameters and uses userNumber to filter through each index of the users number. It replaces all letters with their number counter parts through a series of if statements nested in a for loop.</p>

## Assignment03-Q5:



**Assignment03–Q6:**

The Self documenting principle was used by explaining what each variable and method did as well as the variable and method names being self explanatory. The Encapsulation principle was used with multiple classes as well as the compareAnswers method in computerHost(). The GuessGame class also has methods that display the results of the game even without attributes by itself. All its function comes from the other classes and their methods. Finally, information hiding principle was also used by making all the important values private, such as the attempts, randomNumber, minimum, maximum and computerGuess. They all require private status so that they cannot be easily changed by outside influence. These values cannot be tampered with so, they require private status so they remain untampered. The classes also cannot know the values between each other without having special access, such as the accessor methods.