Q. What would you need to do to your code to make the ‘choice 3’ method in the Choice class a non-static method instead of static?

A. Ensure that none of the fields used in the method are static fields and remove the static keyword form the heading of the method. i.e. public void exampleMethod()

Q. What difference would that make in terms of how you would call the method from within your Menu class?

A. When calling the non-static method from the main method, an instance (object) of the choice class would need to be created to allow the method to run as intended.

Self-Evaluation:

I found this assignment to be a very good challenge. Some parts were easy enough for me to complete because they were very similar to the last assignment and some concepts were familiar to me from previous programming in different languages. E.g. if statements, for loops etc. However, there were some parts that left me very confused and made me ask for help. Mainly the logic for some of the loops. It can take a while for me to get the logic of a loop in my head to the point where I understand it clearly. This did allow me to get more experience with loops in java and the logic behind more complex loops. The area I found most difficult was the 3rd choice. I was very confused as to how I would store multiple values typed in by the user without having to write an endless stream of code. I then thought of using a 1D array to store the values. I had used arrays in other languages and I knew they were very good for storing multiple values. I then learned how to implement a 1D array in java and used it to complete the 3rd choice. I am very pleased with my assignment because I finished all the necessary tasks that were given to me. I am also pleased with the fact that I managed to implement a 1D array into java with no previous experience with implementing arrays in java.

I did not manage to finish the optional task as I could not get it to work. The part where it asks to end after 3 failed attempts. I could not get it to work properly with the requirements that I was given. It would never end when -1 was entered and I could not think of anything that would get it to work correctly.

Public void calculateGrade() {

Start a do loop

Asks the user for a percentage mark

Else if statement to work out what their grade is using the grade scale provided in pdf.

Additional else to display when the user inputs an invalid number.

While condition which repeats the program when condition is true.

}

Public void statistics() {

Declare and create a 1d array.

Declare local variable counter = 0

Open while loop (counter <= 3)

Asks user for a number

Sets number from user to value in array

Adds one to counter

Sets total to 0

Adds all values in array to give total.

Sets average to 0

Takes total and divides it by the number of values in the array.

Sets maximum value to first value in array

Declares variable I as integer.

Opens for loop (I = 0; I <=3; i++)

if (value in array > max)

max = value in array

close for loop

sets minimum value to first value in array

opens for loop (I = 0; I <=3; i++)

if (value in array < min)

min = value in array

close for loop

close while loop

display the values total, average, max and min with respective headings.

}