Compile and Run the program on eve

3. Compile Formatting1.java ,& run it, to see how it works & how the results look.
   The execution should look like this Formatting1 below:

```
bash-4.1$ javac Formatting1.java
bash-4.1$ java Formatting1
Enter two values with decimals 5.6
3.8
   Operation      Value1      Value2      Result

   SUM             5.60        3.80        9.40
```

Comment the Formatting1 program

4. Comment the code now that you know what it is doing, so the reader will too.

Add functions to the Program

5. Now add the code for integers, derived from the earlier decimal inputs , and SAVE_AS Formatting 2.java. Then add code for subtraction, so that it produces the following output:

TURN IN

1. Formatting1 commented source and execution
2. Formatting2 modified source and execution

```
bash-4.1$
bash-4.1$ javac Formatting2.java
bash-4.1$ java Formatting2
Enter two values with decimals 5.6
3.8
   Operation      Value1      Value2      Result

   SUM             5.60        3.80        9.40
   SUM                5           3           8
 Difference        5.60        3.80        1.80
 Difference           5           3           2
Thank you for using Formatting
```

Exercise 2: Increase the functionality of a program

1. Copy this Formatting2 file and save-as Formatting3
2. Add a choice to ask the user if they want to
   a. do addition and subtraction
   b. do multiplication and division
3. If they choose Addition and Subtraction, get 2 new input values
   a. get two input real values
   b. convert reals to integer values
   c. do addition & subtract of both real and int values.
   d. output addition and subtraction results using printf
4. If they choose Mult & Div, use the same values as before (add & subtr)
   a. do Multiplication of both real and int values
   b. Inside the division section, add a loop to check to be sure the second real input value and second integer value, are not zero. If it is zero, ask and get a second input again.
   c. output multiplication and division with printf
5. Add a loop to create the row of *** the size of width, & print it after the header formathd
   a. The output of Formatting3 should look like the following :

TURN IN

1. Formatting3 extended source
2. one execution with all the options gone thru like below

```
bash-4.1$ cd "/home/fa                    1"
bash-4.1$ javac Format
bash-4.1$ java Formatt

Do you want 1 for Add & Subtract
        or 2 for Multiplication and Division,
        or 3 for exit
1
Enter two new values with decimals 5.6
3.8
   Operation      Value1      Value2      Result

-------------------------------------------------
   SUM             5.60        3.80        9.40
   SUM                5           3           8
-------------------------------------------------
 Difference        5.60        3.80        1.80
 Difference           5           3           2

Do you want 1 for Add & Subtract
        or 2 for Multiplication and Division,
        or 3 for exit
2
   Operation      Value1      Value2      Result

-------------------------------------------------
 Product           5.60        3.80       21.28
 Product              5           3          15
-------------------------------------------------
 Quotient          5.60        3.80        1.47
 Quotient             5           3           1

Do you want 1 for Add & Subtract
        or 2 for Multiplication and Division,
        or 3 for exit
1
Enter two new values with decimals 4.8
.9
   Operation      Value1      Value2      Result

-------------------------------------------------
   SUM             4.80        0.90        5.70
   SUM                4           0           4
-------------------------------------------------
 Difference        4.80        0.90        3.90
 Difference           4           0           4

Do you want 1 for Add & Subtract
        or 2 for Multiplication and Division,
        or 3 for exit
2
Enter a non-zero value with decimals, with a non-zero integer portion 2.9
   Operation      Value1      Value2      Result

-------------------------------------------------
 Product           4.80        2.90       13.92
 Product              4           2           8
-------------------------------------------------
 Quotient          4.80        2.90        1.66
 Quotient             4           2           2

Do you want 1 for Add & Subtract
        or 2 for Multiplication and Division,
        or 3 for exit
3
Thank you for using Formatting
bash-4.1$
```