

CS 1400 - Assignment #1

Maximum Points: 20 pts.

Topics:

- Entering, compiling, and running a Java program.
- Using arithmetic expression
- Using Scanner class for input
- Using the Math class

Your programming assignments require **individual** work and effort to be of any benefit. Every student must work independently on his or her assignments. **You cannot use Google, StackOverflow, Chegg or any other on-line resources** to look up for the solution. Sharing your assignments with others in any way is **NOT** permitted. Violations of the University Academic Integrity policy will not be ignored.

Important Note: All submitted assignments must begin with a descriptive block comment (multi-line comments) similar to the one shown below. It must contain your name and the other information illustrated. To avoid losing trivial points, make sure this comment header is included in every assignment you submit, and that it is updated accordingly from assignment to assignment.

```
/* .....  
// AUTHOR: YOUR NAME  
// FILENAME: TITLE OF THIS SOURCE FILE  
// SPECIFICATION: DESCRIPTION OF THIS PROGRAM  
// FOR: CS 1400 - ASSIGNMENT #1  
// TIME SPENT: HOW LONG IT TOOK YOU TO FINISH THIS ASSIGNMENT  
**/
```

Problem Description

The Javelin Throw: Write a Java program named Assignment1.java that will produce the sample runs shown at the end of this handout.

The program asks for the athlete's name. Then the program prompts for three javelin throws, which are input by the user. The three throws will be displayed in various dimensions (meters, yards, feet, inches, and centimeters). (See sample runs below.)

Conversions

- 1 meter = 1.093 yards, 1 yard = 3 feet, 1 meter = 100 centimeters, one foot = 12 inches.

Sample runs: User input is in **bold text**. Each box represents a separate run of the source code.

```
Enter the competitor's name: Sara Kolak

      Olympic Javelin Throws
Enter the distances, in meters, for Sarah Kolak

Please enter the distance for throw 1: 103
Please enter the distance for throw 2: 98
Please enter the distance for throw 3: 99.5

Yards      Feet      Inches      Cm
112.58     337.74     4052.84     10300.00
107.11     321.34     3856.10     9800.00
108.75     326.26     3915.13     9950.00
```

```
Enter the competitor's name: Linda Stahl

      Olympic Javelin Throws
Enter the distances, in meters, for Linda Stahl

Please enter the distance for throw 1: 59
Please enter the distance for throw 2: 112
Please enter the distance for throw 3: 3

Yards      Feet      Inches      Cm
64.49      193.46     2321.53     5900.00
122.42     367.25     4406.98     11200.00
3.28       9.84       118.04      300.00
```

Your output does not need to be perfectly aligned like in the examples. But if you want to align your columns, try to use the Java command `System.out.printf("%-10.2f", your_variable);` In this example, (-) is displaying the number left-justified, (10) was chosen as the minimum width of the number, and (2) as the number of decimal places. You can change those values.

Make sure your program is called Assignment1.java

Submit your homework by following the instructions below:

- Submit your **Assignment1.java** file on GradeScope. Your assignment will be graded only if it is submitted there, NOT on Canvas or sent by email.
- Assignment1.java file should have the following, in order:
 - In comments, the assignment Header described and demonstrated in "Important Note".
 - The working Java code requested in "Problem Description".
- The Assignment1.java file must compile and run as you submit it

Important Note: You may resubmit as many times as you like until the deadline. Only your last submission will be considered.

NO LATE ASSIGNMENTS WILL BE ACCEPTED. ALWAYS SUBMIT WHATEVER YOU HAVE COMPLETED FOR PARTIAL CREDIT BEFORE THE DEADLINE!