

University of Massachusetts Dartmouth
Department of Electrical and Computer Engineering

ECE 160
Project 4

Name: convchart.cpp
Due: see <http://ece160.org>

Write a program that will produce a chart showing equivalent kilometers/hour, rods/min, furlongs/fortnight, and Smoots/second. The chart must have appropriately labeled column headings, and the right most digit of each value must be in columns 18, 36, 54, and 72 respectively. All values should be printed to 4 decimal places. The program must prompt the user to enter an initial value, and accept an initial value. Next the program must prompt the user to enter the final value and accept a final value. Finally, the program must prompt the user to enter an increment, and accept an increment value. The program must then print a table with appropriate column headings. Once the table is complete, the program should prompt the user for another set of input values in the same way. This should continue until the user enters 0 for increment. Some sample runs are shown below (user input is underlined).

```
Enter initial value: 150.0
Enter final value: 190.0
Enter increment value: 5.0
```

miles/hr	rods/min	furlngs/frtnght	Smoots/sec
150.0000	800.0000	403200.0000	39.4030
155.0000	826.6667	416640.0000	40.7164
160.0000	853.3333	430080.0000	42.0299
165.0000	880.0000	443520.0000	43.3433
170.0000	906.6667	456960.0000	44.6567
175.0000	933.3333	470400.0000	45.9701
180.0000	960.0000	483840.0000	47.2836
185.0000	986.6667	497280.0000	48.5970
190.0000	1013.3333	510720.0000	49.9104

```
Enter initial value: 0.0
Enter final value: 4.0
Enter increment value: 0.25
```

miles/hr	rods/min	furlngs/frtnght	Smoots/sec
0.0000	0.0000	0.0000	0.0000
0.2500	1.3333	672.0000	0.0657
0.5000	2.6667	1344.0000	0.1313
0.7500	4.0000	2016.0000	0.1970
1.0000	5.3333	2688.0000	0.2627
1.2500	6.6667	3360.0000	0.3284
1.5000	8.0000	4032.0000	0.3940
1.7500	9.3333	4704.0000	0.4597
2.0000	10.6667	5376.0000	0.5254
2.2500	12.0000	6048.0000	0.5910
2.5000	13.3333	6720.0000	0.6567
2.7500	14.6667	7392.0000	0.7224
3.0000	16.0000	8064.0000	0.7881
3.2500	17.3333	8736.0000	0.8537
3.5000	18.6667	9408.0000	0.9194
3.7500	20.0000	10080.0000	0.9851
4.0000	21.3333	10752.0000	1.0507

```
Enter initial value: 0.0
Enter final value: 0.0
Enter increment value: 0.0
Press any key to continue . . .
```

Remember to include the required certification found at the end of the Grading Rubric. Also, check the rubric before handing in your project to insure you haven't made any obvious errors that result in loss of points.