

# Assignment 7

24 February 2011

due Thursday 3 March at 01:00 AM

## Description

Write a program that will:

1. Ask the user whether to convert pounds to kilograms (1) or kilograms to pounds (0).
2. If user enters an invalid choice for previous item, ask him to try again.
3. Ask the user for a start amount, stop amount, and step.
4. If user enters a negative numbers for the step, or if stop is smaller than start, ask him to try again.
5. Print a well-formatted conversion table. To convert pounds to kilograms, divide by 2.2. To convert kilograms to pounds, multiply by 2.2.

Here are a few sample runs of the program, but it should work for other numbers as well.

```
Convert pounds to kg (1) or kg to pounds (0)? 1
Enter start amount: 90
Enter stop amount (> 90.0): 120
Enter step (> 0): 5
```

POUNDS	KILOGRAMS
-----	-----
90.0	40.9
95.0	43.2
100.0	45.5
105.0	47.7
110.0	50.0
115.0	52.3
120.0	54.5

```
Convert pounds to kg (1) or kg to pounds (0)? 0
Enter start amount: 90
Enter stop amount (> 90.0): 110
Enter step (> 0): 4
```

KILOGRAMS	POUNDS
-----	-----
90.0	198.0

94.0	206.8
98.0	215.6
102.0	224.4
106.0	233.2
110.0	242.0

Below is an example that shows all the error messages that should be supported.

```
Convert pounds to kg (1) or kg to pounds (0)? 2
Try again (1 or 0): 3
Try again (1 or 0): 1
Enter start amount: 14
Enter stop amount (> 14.0): 7
Error: stop must be greater than start.
Enter stop amount (> 14.0): 16
Enter step (> 0): 0
Error: step must be greater than zero.
Enter step (> 0): -1
Error: step must be greater than zero.
Enter step (> 0): .2
```

POUNDS	KILOGRAMS
-----	-----
14.0	6.4
14.2	6.5
14.4	6.5
14.6	6.6
14.8	6.7
15.0	6.8
15.2	6.9
15.4	7.0
15.6	7.1
15.8	7.2
16.0	7.3