

## Program\_02\_6

### Requirements

- Complete exercise **2.8 on page 52 (7th edition)** with the modifications listed below.
- Include comments and create well-formatted output as shown below.
- At the top of your program, assign the values of conversion factors to descriptive variable names as shown. (Replace ... with the remaining conversion factors needed for the program)

```
% Definition of Conversion Factors
MetersPerYard=0.9144;
...
```

- Use **input** statements to allow for any numerical values to be input by a user. Be sure to add a prompt statement before the input.

```
fprintf('Part A:\n\n')
yards=input('Enter a distance in yards then hit enter: ');
```

- Use the variables defined in your list of "Definition of Conversion Factors" to convert your inputted values.
- Format your output as shown below.

**Note:** I will be using various values to confirm the calculations work properly so it would be wise to do the same with your own program.

### Program

In the code block below, create your program, editing the existing text as necessary.

**Note:** If you are using Octave then you will need to create a separate script file, save that separate file as the name **Program\_02\_06**. It will not conflict with this file of the same name since the extension will be different.

```
% Filename:
% Author:
% Assisted by:
% Date:

% Program Description:

% Clear the command window and all variables

% Output of the title and author to the command window.

% Main program
```

## Output

Output for Program\_02\_6 written by Geoff Berl.

Part A:

Enter a distance in yards then hit enter: 22

22 yards = 20.1168 meters

Part B:

Enter a weight in Kg then hit enter: 75

75 Kg = 165.347 pounds

Part C:

Enter a speed in m/s then hit enter: 49

49 m/s = 176.4 km/h

Part D:

Enter a pressure in psi then hit enter: 40

40 psi = 275.79 kPa

Part E:

Enter an energy in Kj then hit enter: 6.25

6.25 Kj = 1493.12 cal