🤔 Functions: Exercises

Q1) Write a function that takes a temperature in fahrenheit and returns the temperature in celsius.

Input	Output
32	0
113	45
26.6	-3

Q2) Write a program that calculates the mean of a list of numbers. The program should continuously ask the user for an integer until they enter blank input. The sum of the integers and the total number of integers provided should be passed to a function that calculates the mean. Here's the function definition to help you get started:

```
def calculate_mean(total_sum, num_items):
    pass
```

Input	Output
4 3 2 6	3.75

Q3) In a previous exercise we read a csv file full of colours and outputed their RGB code, Hex code and name. We're going to complete the same exercise, but this time using functions.

Two function definitions are provided below. `read_csv_file` takes a filepath (string) and returns the contents of that file as a list. format_colour_line takes the list of data for a specific colour, the formats and returns the relevant fields. Your task is to complete these functions.

```
def read_csv_file(filepath):
      return

def format_colour_line(colour_data):
      return
```

Input	Output
colours_20.csv	RGB HEX English 190-189-127 #BEBD7F Green beige 194-176-120 #C2B078 Beige 198-166-100 #C6A664 Sand yellow 229-190-001 #E5BE01 Signal yellow 205-164-052 #CDA434 Golden yellow 169-131-007 #A98307 Honey yellow 228-160-016 #E4A010 Maize yellow 220-156-000 #DC9D00 Daffodil yellow 138-102-066 #8A6642 Brown beige 199-180-070 #C7B446 Lemon yellow 234-230-202 #EAE6CA Oyster white 225-204-079 #E1CC4F Ivory 230-214-144 #E6D690 Light ivory

	237-255-033 #EDFF21 Sulfur yellow 245-208-051 #F5D033 Saffron yellow 248-243-053 #F8F32B Zinc yellow 158-151-100 #9E9764 Grey beige 153-153-080 #999950 Olive yellow 250-210-001 #FAD201 Traffic yellow
colours_213.csv	RGB Code HEX Code English Name 190-189-127 #BEBD7F Green beige 194-176-120 #C2B078 Beige 198-166-100 #C6A664 Sand yellow 229-190-001 #E5BE01 Signal yellow 205-164-052 #CDA434 Golden yellow 169-131-007 #A98307 Honey yellow 228-160-016 #E4A010 Maize yellow 220-156-000 #DC9D00 Daffodil yellow 138-102-066 #8A6642 Brown beige 199-180-070 #C7B446 Lemon yellow 234-230-202 #EAE6CA Oyster white 225-204-079 #E1CC4F Ivory 230-214-144 #E6D690 Light ivory 237-255-033 #EDFF21 Sulfur yellow 245-208-051 #F5D033 Saffron yellow 248-243-053 #F8F32B Zinc yellow 158-151-100 #9E9764 Grey beige 153-153-080 #999950 Olive yellow 250-210-001 #FAD201 Traffic yellow 174-160-075 #AEA04B Ochre yellow 255-255-000 #FFFF00 Luminous yellow 157-145-001 #9D9101 Curry 244-169-000 #F4A900 Melon yellow (etc… until colour 213)

Q4) In a previous exercise we wrote a program that outputs a receipt for grocery items. Modify this program to use a function to calculate the total cost for each item. A function definition is provided to get you started:

```
def calculate_cost(unit_price, number_purchase):
    return
```

Input	**Output**
1 3 2 1 4 2	====Izzy's Food Emporium==== Baby Spinach $2.78 Hot Chocolate $11.10 Crackers $4.20 Bacon $9.00 Carrots $2.24 Oranges $6.16 ========== $35.48