python_how_to_write_a_good_function_workbook_answers

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1 PYTHON HOW TO WRITE A GOOD FUNCTION WORKBOOK ANSWERS

Remember, there are different ways to write code to get the same answer, so your answer can be correct and different to the answer example!

If you feel stuck and want some in person help, then have a look at the events page to join in a workshop https://swamphen.co.uk/events.

1.1 These are the same questions as in the last workbook. I want you to re-visit your answers and think about the ways to make them great functions.

1.2 Add a comment to each function explaining what they do

In [ ]:
```
# write and test a function to change a string from upper to lower case

my_string = 'TAMARA'

def change_to_lower_case(my_string):
    'change a string to lower case and saves as new variable name'
    answer = my_string.lower()
    return(answer)

answer = change_to_lower_case(my_string)

print(answer)
```

In [ ]:
```
# write and test a function to add 2 to a given number and print to screen

a = 4

def add_two(a):
    'add two to the inputted number and prints to screen'
    print(a + 2)
    return

add_two(4)
```

In [ ]:
```
# write and test a function to pick out even numbers from a list and print

my_list = [1,2,3,4,5,6]

def select_even(my_list):
    'selects elements from a list that are even numbers and saves to new list'
    for number in my_list:
        if number%2 == 0:
            print(number)
    return

select_even(my_list)
```

In [ ]:
```
# write and test a function to pick out strings starting with a from a list
# and save them to a new list

my_list = ['apple', 'bananna', 'avacado', 'feijoa', 'kiwi']

def select_a(my_list):
    'selects strings starting with a from a list and saves as a new list'
    list_a = []
    for fruit in my_list:
        if fruit[0] == 'a':
            list_a.append(fruit)
    return(list_a)

list_a = select_a(my_list)
print(list_a)
```

In [ ]:
```
# write and test a function to check if all elements in a list are floats,
# if not change them to a float
# create a new copy of the list which is all floats
# the input list is a mixture of integers, floats, numbers and
# Booleans as strings

my_list = [1,2,3.3,5.5, '8', '9.9']

def change_to_float(my_list):
    'changes elements of a list into floats and saves as new list.'
    'input list can be mixture of integers, floats, numbers and booleans'
    float_list = []
    for element in my_list:
        if type(element) != float:
            float_list.append(float(element))
        else:
            float_list.append(element)
    return(float_list)
```

```
float_list = change_to_float(my_list)

print(float_list)
```