Cool down

Target:

- Learn about:
    - Functions and lambda expression in python
    - Errors and Exceptions in python
    - Importing in python

Problems:

Solve the problems in the next page

Evaluation:

Problem 1 → 3 points

Problem 2 → 3 points

Problem 3 → 1 points

Problem 4 → 3 points

Sources:

1- Udacity Python course [Lesson 5, 6] – [All of the targets are covered here]
2- Tech with tim [Lambda expression]
3- Corey Schafar [Error handling]
4- W3Schools [For revision if you already have previous knowledge]

Deadline:

3 days # Saturday 30 April at 23:59

Problems:

1. Given a list of integers, write a function to sort a list and another function to return the first and last appearance of a given target in the sorted list.
   # [5,7,7,8,8,8,10], target = 8 → [3,5]

2. Write a program to get the count of even numbers in a given list. [make use of lambda expression]
   # [5,7,7,8,8,8,10] → 4

3. Import the functions from problem 1 to a different script and get user input and the final result in that script. Handle any possible errors.

4. Given a list of integers, write a function to get the sub list that results in the largest sum and the one that results in the smallest sum. return both lists and their sum. You will get the list from the user and it must contain only integers. Handle any possible errors. [Len(sublist) > 1]

   # [5 , 4,-1, 7, 8] → largest sub-list = [7,8,5,4] (24) , smallest sub-list = [4,-1] (3)

5. Do you think the deadline is a) too close b) okay c) too far for this task?
   # Add any comments you want.

Bonus Problems: # for nerds only

1- You are given a list of integers, write a function to get the index of the three numbers that add up to a target number given.
   [Use two different methods if you can.]
   # [1,3,5,6,9] , target = 9 → 0,1,2