Control Structures + Lists and Loops

Practice 1

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1. Finding Sum of Positive Integers in list

- Make a function P1 that takes a list consisting of only integers as input, adds only the positive integers among the elements of the list, and returns the sum.

- Conditions

1. The input list consists only of integers.
2. Return 0 if there are no positive integers in the list.

  - **Ex 1)**
    >>> P1([1, 2, -3])
    -> 3

  - **Ex 2)**
    >>> P1([-1, 0])
    -> 0

2. Print stars

- Make a function that print stars as below.
  - **(1) star_flag(n) (n is a positive number)**
    def star_flag(n: int) -> None:
  - **(2) star_Z(n) (n>2)**
    def star_Z(n: int) -> None:

star_flag(3)

```
*
**
***
**
*
```

star_flag(5)

```
*
**
***
****
*****
****
**
*
```

star_Z(4)

```
****
  *
 *
****
```

star_Z(5)

```
*****
    *
   *
  *
*****
```

3. Nested List

- Make a function P3 that receives a nested list as an input and returns a list that satisfies the conditions below.

- Conditions

1. The input list is looks like [[word, length]]
2. Words consist only of lower case letters
3. Collect words from the input list and return as a list
4. The list must be alphabetically ordered

- **Ex 1)**
  >>> P3([[‘apple’, 5],[‘banana’, 6]])
  -> [‘apple’, ‘banana’]

- **Ex 2)**
  >>> P3([[‘cup’, 3], [‘ace’, 3], [‘nice’, 4], [‘good’, 4]])
  -> [‘ace’, ‘cup’, ‘good’, ‘nice’]

Thanks!

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