Week 4 - Python Applications & String

We can create a variety of applications with Python. In week 4, we saw how to use Python to implement some Unix tools (uniq, cat, grep, wc). Those might appear to be boring to you because you don't use uniq in your daily life. How about creating an application that you really need every day? You can come up with your own ideas, but here we'll start with a money management application.

Let's start from the very beginning. Write a program that lets a user input the initial amount of money and one record of expense or income. The program will report the balance.

```
$ python3 pymoney.py
How much money do you have? 1000
Add an expense or income record with description and amount:
breakfast -50
Now you have 950 dollars.
```

Required Steps

1. Use **`input()`** function to accept the inputs.
2. Use **`str.split()`** method to deal with the input record.
3. Use **`int()`** function to convert the value.
4. Calculate the balance.
5. Use string formatting and **`print()`** to report the balance to the user.

Notes

- The amount input by the user could be negative (representing expense) or positive (representing income). The "+" sign is optional for positive numbers. If you use the **`int()`** function, both strings "95" and "+95" are converted to the integer value 95.
- You might get two strings returned from the **`split()`** method. The first one is the description (e.g. "breakfast") and the second one is the amount of expense or income (e.g. "-50"). For now, your program doesn't need to handle the first string. Just convert the second string to integer and do the remaining operations.

Related Knowledge

- input() and print() functions
- Operators
- Integers
- Variables
- Strings
- str.split() method
- String formatting