LAB: L1

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INITIAL DESIGN PLAN: First it waits for the user to enter input, and checks whether that input is 15 or higher. If not, it asks for a new input, until that condition is satisfied. Afterwards it asks for the number of balls the user wants to take, and if that number is 4 or less it prints out that number and takes that number from the total number of balls. After that the computer takes a certain number of balls, depending on how many there are left, and it prints out how many balls the computer took. If possible, it leaves the user with a multiple of 5 balls left, if not it just takes a random number of balls. This repeats as many times needed until there are no more balls left, and it prints out the winner.

SUMMARY: From the start, the idea was to make a game in which the user and computer would take turns taking certain amounts of balls. At the beginning I was using two different functions for taking the inputs of the user, but by the end that evolved in a single function used in different ways.

Accomplishing this change, and overall completing the lab didn’t take a lot of time, however, there were some problems that appeared when trying to write the function which determines how many balls the computer will take. At the end I was satisfied with the result, because the program performed exactly as I wanted.

IMPLEMENTATIONS:

* Ask for user input, both for a starting number of balls, and for the amount of balls that the user wants taken out
* Computer decision on how many balls to take, always trying to beat the player by making the amount of balls left a multiple of 5, if possible
* Repeating the gameplay by using loop until no balls are left
* Announcing the winner

TESTING:

* Tried entering 10 i.e. a number less than 15.
* Tried entering more than 4 balls to be taken
* Tried entering more balls to be taken out than there are in the pile
* Tried to see if computer brings it to a multiple of 5 every time it can

FILES:

* Cvetanovskaa-L1.py
* Cvetanovskaa-L1.docx

ERRORS:

As far as I know there are no errors.

COMMENTS: I liked this lab a lot. It allowed me to implement the things that I learned in this class in the purpose of creating a game, and that was really fun. It was interesting to see