This is the second of the three assignments that will be graded. You can score a maximum of 3 points for this assignment, 1 point for each exercise.

Exercise 1. Reverse

a.) Write a program that asks for a user's input and prints that string in reverse. You must do this by hand, that is with an explicit loop instead of other operators. Example input -> output

- "Beautiful is better than ugly." -> ".ylgu naht retteb si lufituaeB"

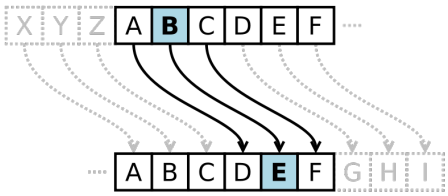
Exercise 2. Passwords

a.) Write a program that calculates how secure a password is (weak, medium, strong). You can come up with your own calculation, but at least take into account: the amount of characters and the diversity of characters (lowercase, uppercase, numbers and special characters).

- the password "a" is weak
- the password "Tr0ub4dor&3" is medium
- the password "correct horse battery staple" is strong[1]

Exercise 3. Cryptography

a.) Write a program that asks the user for an input string and a number n. The program should output that string, but with every letter shifted with the amount of n. For example 'B' shifted by 3 would become 'E'.



example input → output:

- "a", 1 -> "b"
- "ab c", 1 -> "bc d"
- "aBc", 2 ->"cDe"

[1] Mandatory nerdy comic: `https://xkcd.com/936/`

- ”xyz?”, -20 -> ”def?”
- ”z”, 1 -> ”a”
- You may use the ord()-function to convert a character to its ascii integer value
- You may use the input (or raw_input) function twice, once for the string and once for the number n
- A capital letter in the input should result in a capital letter in the output, the same holds for lower case letters
- Non-letter characters should remain untouched

End of the assignment