

CS50 Python Final Project

A program calculating the parameters of a mortgage loan

Paweł Dudek, 09.2023

Links

- Course page:
<https://cs50.harvard.edu/python/2022/>
- Final project requirements:
<https://cs50.harvard.edu/python/2022/project/>
- Github project with a source code:
[https://github.com/PaweIDk/CS50 Python Final Project](https://github.com/PaweIDk/CS50_Python_Final_Project)

Available functionalities

What are the capabilities of prepared framework

Main:

- calculate the total amount to be repaid,
- calculate the total interest on the loan,
- calculate monthly payment:
 - constant for equal installments,
 - first month payment for decreasing installments,
- generate basic payment schedule, including for each month:
 - installment amount,
 - amount remaining to be repaid

Optional - calculations related to overpayment:

- calculate lower monthly payment after one-time overpayment,
- generate new payment schedule considering overpayment,
- calculate total savings resulting from overpayment,

Additional calculations related to the mortgage:

- calculate savings resulting from the choice of decreasing installment