Exam Abstract

Python – Dat18V2

- **Data structures and functions**
  - I will have prepared my own implementation of the following:
    - Singly linked list
    - Dictionary
    - Sorting, numbers
- **IO and Context Managers**
  - I will present how to work with files and the different behaviors that can set up.
  - I will mainly focus on Context Managers, why they are worth using and basic principles of how they work, which will also relate to generators.
- **Python OOP**
  - Keeping it DRY – don't repeat yourself.
  - How to access and use other classes.
  - Args & Kwargs, how they make python generic.
- **Protocols**
  - I will demonstrate how protocols work and how they can be overwritten, to behave in certain way, that will benefit the current program they are being used in.
  - I will also talk about how protocols are used for encapsulation.
- **Generators**
  - I will show prepared code, that demonstrates how python, with the use of generators use less RAM, making it faster for larger data sets.
  - I will talk about the differences between *yield* and *return.*
- **Decorators**
  - I will talk about Inner functions and how they work, why they are relevant as a python programmer.
  - I will have prepared a few examples of how to use and extends methods with decorators.
  - I will also demonstrate how decorators encapsulate, limiting access to certain code.