ST2411 Python Assignment 2 Report

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Introduction

Overall, building the assignment with Python was a fruitful and enjoyable experience. The syntax is different from languages I am fluent in, namely Java and Objective-C; however I enjoyed the exposure and opportunity to learn a new programming language.

Problems Encountered

One thing that I struggled with considerably was how "code blocks" are structured in the syntax. Python structures "code blocks" by indentation, instead of curly braces, and this confused me significantly initially as I had to adapt my coding style to this new requirement.

Adding on to the switch to indentation, I had a mixture of "tabs" and indentations of four spaces. This confused the python compiler and kept throwing errors. When I realised the problem, I had to painstakingly go through each line of code and replace the tabs with four spaces. I changed the settings of my text editor after to automate this process and translate tabs into four spaces to make it easier.

Python also doesn't declare variables the same way as in other languages. There is no need to declare a data-type. Instead, you simply assign values to a variable. It took some time for me to get used to this.

Knowledge Gained

I was glad to discover that Python has data-types such as "Decimal" which make it easier for me to process the data in this assignment, namely the sales amount from the different sales records.

In addition, I learnt how Python has made it a lot easier and faster to write the code to do a given task compared to other languages. Many common operations that I would have to write code to handle myself in other languages is built into python, with a layer of abstraction that makes it easy for me to write a program. This allowed to spend the time on optimising the program, and writing elegant code for the main features, and saving the time I would normally spend creating functions to do some of the common operations.

Overall, learning Python was a painful process in the beginning, but once I got the hang of it, I was able to adapt to the new syntax style unconsciously.

After writing the code for the assignment in Python, I have discovered a newfound love for the language and its incredibly simple syntax. The experience was incredible, and Python is a language I hope to use more often in the future.