**Report on Python Programming Lab assignment**

The programming lab assignment involved solving six exercises that covered a variety of fundamental programming concepts, such as control structures, user input handling, functions, loops, and conditional logic. Reflecting on the lab, I found the problems both challenging and engaging, and each one allowed me to improve my understanding of core Python concepts.

**Challenges Encountered:**

Initially, I encountered some difficulty in keeping track of input types, particularly distinguishing between integers and floats for specific calculations, such as in the BMI calculator and property tax questions. However, I quickly realized that Python's type conversion functions like int() and float() are crucial for ensuring correct arithmetic operations. Another challenge was using conditional logic to assign letter grades based on score ranges, which required careful planning to avoid errors in range comparison.

**Overcoming Obstacles:**

I overcame these challenges by reviewing Python’s built-in functions and the logic behind conditional statements. For the test score grading problem, I had to ensure that the ranges for each grade were correct and non-overlapping, which required careful use of if, elif, and else conditions. I also made use of the print() function with formatted strings to ensure clarity in displaying results. Utilizing resources like Python documentation and practicing on smaller test cases for each exercises helped me overcome these obstacles.

**Lab Difficulty:**

Overall, I would describe the lab as moderately average. While the concepts themselves were straightforward, careful attention to detail was required to avoid common mistakes, especially in handling user input and data types. The use of functions, such as my\_max() for finding the greater of two values or determine\_grade() for assigning letter grades, helped modularize the code and made it easier to debug and test individual parts of the program.

**Conclusion:**

This lab was a good learning experience and helped reinforce my understanding of key programming concepts and most of the concepts was directly related with our previous lecture class (e.g if \_ \_ name\_ \_ = “\_ \_ main\_ \_ ” : function). By the end, I felt more comfortable with handling user input, loops, conditionals, and functions in Python. It also gave me an opportunity to reflect on writing clean python code. I feel confident in applying these skills to future related problems.