

4ME501 Assignment 1
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Introduction

In this assignment I had to implement five tasks that had to be resolved with the use of the Python programming language. Because Python was new to me, I had to consult several online tutorials that are giving guidelines from scratch and can assist the beginner to make his first steps in programming with Python. Before I started working on my tasks, I watched the online tutorial that are available on vimeo and also I practiced other small scripts that I found online to improve my programming skills.

Approach to solving the given problem and tasks

For solving the tasks I mainly used stackoverflow.com, as there were already similar questions and problems asked by other people who were facing the same problems as I. The first two tasks were the easiest to implement since the solution was just a couple of lines of code. The other two were more complex, so I tried to think the simplest way of finding a solution. Although, I am not sure if the method I selected is the appropriate one, the outcome of the code seems to be very close to what is expected from the students. Specifically, I divided the problem in small parts and for each one I was googling in the internet or i was checking the online tutorials.

Outcomes/Analysis of results

Finally, I managed to implement all of the tasks. The most difficult one for me was the fourth. The reason for that is because I was in trouble to think of a method to solve it. The solution was to break the problem in smaller tasks to reach the final solution. Another think was that the commands I had to use were unknown to me, so I had to search the internet to find out how everything was done.

Conclusions and Reflections

I think that this assignment was rather challenging for me and interesting in a

great degree. I put myself in a position to think solutions; something that is beneficial as it sharpens the mind. This assignment gives me great courage to carry on in the future and work on similar and even more difficult projects.

References

<https://www.tutorialspoint.com/python3/index.htm>

<https://stackoverflow.com/questions/19790944/how-can-i-put-these-numbers-in-list>

<https://stackoverflow.com/questions/3989016/how-to-find-all-positions-of-the-maximum-value-in-a-list>

<https://stackoverflow.com/questions/6910641/how-to-get-indices-of-n-maximum-values-in-a-numpy-array>

<https://stackoverflow.com/questions/480214/how-do-you-remove-duplicates-from-a-list-in-whilst-preserving-order>

<https://stackoverflow.com/questions/6193498/pythonic-way-to-find-maximum-value-and-its-index-in-a-list>

<https://docs.python.org/2/library/re.html#re.findall>