Employee Management System Functionality 4

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As I began this assignment, I was directed to improve my “View all Employees” functionality to view results in the format provided. The format that I presented in functionality 3, had the phone number with a parenthesis between the first three numbers. I edited that format to display the phone number with a “-“. That part of my assignment was the most simple for me. I then was directed to make two new functions that provided the user an option to “Search employee by SSN” and “Edit employee information. I attempted this for several hours of research and trial and error and was not able to get the output I wanted.

When I started to make a function, which would provide the user with the option to search employee by SSN, I started my function by giving the user a prompt to enter the SSN of the specific employee that they would like to search for. I used the “split()” method combined with a for loop to convert the string of numbers to a list in which I planned to use the list to compare other list of SSNs’ that had already been entered to the system. This is where I became stuck and spent hours of online research to find what would be the best option for me to search the already entered SSN’s. I attempted to go back to my function, in which the user entered the employee information and create a list of the numbers that were entered. I thought this would give me a chance to have separate list of entered SSN’s, in which I could possibly compare the list to the generated list of numbers from the search option. I was not able to get this to work for me with many trial and error attempts.

During my researching and trial and error, I became familiar with multiple types of list methods and regular expression or regex. Regular expression module in Python provies regular expression matching operations. Patterns and strings can be search in Unicode (“re – Regular expression operations – Python 3.8.1 documentation”, 2020). I was able to understand how to use the “compile”, “search” and “match” options of regex. I was able to make a function that would search for one or more matches of numbers in the social security number. I was not able to come up with a solution of how to use the search function to search the employees that had been entered into the system. If my function would have worked the way I wanted and a match was made, this function would have taken the user into an edit option.

I made a edit function to give the user a opportunity to edit information of the employee that matched with the SSN they entered. This function would give the user a prompt to select a number for the section of the employee’s information that they would like to edit. When they selected the section, they would like to edit, they would be able to edit the selection. After the edit, the edited information would change the variable for that section of the employee information in the system.

I was not able to make my attempts work to get the output I wanted. During this assignment I was able to learn many ways to use regular expressions in a script to data. The purpose of this assignment was to find and use different functions in Python to get different output. Using functions is helpful because you can call a function later in the script for quality use. Functions allows us as programmers to not have to write repeated code. Calling the function and using its arguments are an advantage. This assignment shows how to search a database in which could be very large, to get almost any set of possible strings. A screen shot of my functionality is below:

A screenshot of a cell phone

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References

re — Regular expression operations — Python 3.8.1 documentation. (2020). Retrieved 28 January 2020, from https://docs.python.org/3/library/re.html