**Week 2 – Assignment**

**Employee Management System – Functionality 2**

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CPT 200: Fundamentals of Programming Languages

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**Purpose**

The main objective of this code is to collect details of five employees like their name, SSN, phone number, salary, and email. After collecting the information, it stores each employee's data in a list. Subsequently, it offers the user an option to view a specific employee's data by inputting an index.

**Variables**

1. These store the user's input. For example, `userName` stores the name.
2. employeeName1, employeeName2, ..., employeeName5: Store the names of employees.
3. employeeSSN1, employeeSSN2, ..., employeeSSN5: Store the Social Security Numbers of employees.
4. employeePhone1, employeePhone2, ..., employeePhone5: Store the phone numbers of employees.
5. salary1, salary2, ..., salary5: Store the salaries of employees.
6. email1, email2, ..., email5: Store the email addresses of employees.
7. employees: A list that accumulates the data of all employees.
8. index: Stores the user's choice for which employee's information to display.

**Functions**

* input(): This built-in function collects data from the user.
* print(): This built-in function displays the data or outputs to the console.

**Selection**

* if and else: Here, they are used to validate the user's input when they wish to view a specific employee's data. It checks if the entered index is valid (between 1 and 5) and then fetches the appropriate employee's data or gives an error message.

**Repetition**

While there is repetition in terms of structure (you are collecting data for five different employees in a very similar manner), it isn't achieved using loops but rather through manual repetition of the code.

**Conclusion**

The script is designed for the purpose of collecting, storing, and selectively displaying the details of five different employees. The data for each employee is obtained sequentially, then stored in a master list (employees). The user can then select a specific employee's data by entering a valid index number. The script ensures that this selection is within the permitted range. Selection constructs (if and else) are employed to provide user feedback or to display data. It’s evident that the script has aspects of both data collection and validation, and then presentation based on user selection. The script could benefit from the use of loops to eliminate redundancy and improve efficiency.

Here's the in-depth look! I hope it's straightforward!

A screenshot of a computer program

Description automatically generated

A screenshot of a computer screen

Description automatically generated

A screenshot of a computer

Description automatically generated

[Source Code](https://ray.so/" \l "code=)

[Console](https://ray.so/#code=&width=796)