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Task: Lab 8

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Lab Task 8: Multilevel Employee Management with File Handling in Python

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```python
class Person:
    def __init__(self, name, age):
        self.name = name
        self.age = age

    def display_info(self):
        print(f"Name: {self.name}, Age: {self.age}")

class Employee:
    def __init__(self, employee_id, position):
        self.employee_id = employee_id
        self.position = position

    def display_info(self):
        print(f"Employee ID: {self.employee_id}, Position: {self.position}")

class Staff(Person, Employee):
    def __init__(self, name, age, employee_id, position, department):
        Person.__init__(self, name, age)
        Employee.__init__(self, employee_id, position)
        self.department = department
```

```python
    def additional_info(self):
        print(f"Department: {self.department}")


import os

def read_employee_info(filename):
    staff_list = []
    if os.path.exists(filename):
        with open(filename, 'r') as file:
            lines = file.readlines()
            for line in lines:
                data = line.strip().split(',')
                name = data[0]
                age = int(data[1])
                employee_id = int(data[2])
                position = data[3]
                department = data[4]
                staff = Staff(name, age, employee_id, position, department)
                staff_list.append(staff)
    return staff_list

def add_employee_info(filename, staff_object):
    with open(filename, 'a') as file:

file.write(f"{staff_object.name},{staff_object.age},{staff_object.employee_id},{staff_object.position},{staff_object.department}\n")

def save_employee_info(filename, staff_objects):
    with open(filename, 'w') as file:
        for staff in staff_objects:

file.write(f"{staff.name},{staff.age},{staff.employee_id},{staff.position},{staff.department}\n")

new_staff = Staff("Muhammad Sharique", 30, 1001, "Manager", "Sales")
```

```python
filename = "employee_info.txt"
add_employee_info(filename, new_staff)

staff_list = read_employee_info(filename)
for staff in staff_list:
    staff.display_info()
    staff.additional_info()
    print()

save_employee_info(filename, staff_list)
```