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Task: Lab 10

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Lab Task 10: Python Program for Encapsulation

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class Employee:  
    def __init__(self, name, age, salary):  
        self.__name = name  
        self.__age = age  
        self.__salary = salary  
  
    def get_name(self):  
        return self.__name  
  
    def set_name(self, name):  
        self.__name = name  
  
    def get_age(self):  
        return self.__age  
  
    def set_age(self, age):  
        self.__age = age  
  
    def get_salary(self):  
        return self.__salary  
  
    def set_salary(self, salary):  
        self.__salary = salary
```

```

class Manager(Employee):
    def __init__(self, name, age, salary, department):
        super().__init__(name, age, salary)
        self.__department = department

    def get_department(self):
        return self.__department

    def set_department(self, department):
        self.__department = department

class Worker(Employee):
    def __init__(self, name, age, salary, hours_worked):
        super().__init__(name, age, salary)
        self.__hours_worked = hours_worked

    def get_hours_worked(self):
        return self.__hours_worked

    def set_hours_worked(self, hours_worked):
        self.__hours_worked = hours_worked

def save_data(name, age, salary, department, hours_worked):
    with open("Employee_information.csv", "a") as f:
        writer = csv.writer(f)
        writer.writerow([name, age, salary, department, hours_worked])

def read_data():
    with open("Employee_information.csv", "r") as f:
        reader = csv.reader(f)
        for row in reader:
            print(row)

```

```
def menu():
    while True:
        print("\nMenu:")
        print("1. Add new employee information")
        print("2. Display employee information")
        print("3. Update employee information")
        print("4. Delete employee information")
        print("5. Exit the program")

        choice = int(input("Enter your choice: "))

        if choice == 1:
            name = input("Enter the name: ")
            age = int(input("Enter the age: "))
            salary = int(input("Enter the salary: "))
            department = input("Enter the department: ")
            hours_worked = int(input("Enter the hours worked: "))
            save_data(name, age, salary, department, hours_worked)
            print("Employee information added.")

        elif choice == 2:
            read_data()

        elif choice == 3:
            print("Update feature is not implemented in this version.")

        elif choice == 4:
            print("Delete feature is not implemented in this version.")

        elif choice == 5:
            print("Exiting the program.")
            break

        else:
            print("Invalid choice. Please try again.")
```

