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In [15]: class Employee:
    def __init__(self, name, salary):
        self.name = name          # Public
        self.__salary = salary    # Private

    def show_info(self):
        print(f"Employee Name: {self.name}")
        print(f"Salary: ₹{self.__salary}")

    def update_salary(self, amount):
        if amount > 0:
            self.__salary = amount
        else:
            print("Invalid salary update!")

emp = Employee("Riya", 50000)
emp.show_info()
print(emp.name) #accessing public var
#print(emp.__salary) #accessing private var
# Trying to access private variable print(emp.name)
# Correct way to update private field
emp.update_salary(60000)
emp.show_info()
```

Employee Name: Riya  
 Salary: ₹50000  
 Riya  
 Employee Name: Riya  
 Salary: ₹60000

```
In [23]: #creating getter and setter manually
class Student:
    def __init__(self):
        self.__grade = None #private

    def set_grade(self, g):
        if g in ['A', 'B', 'C']:
            self.__grade = g
        else:
            print("Invalid grade!")

    def get_grade(self):
        return self.__grade

s = Student()
#print(s.grade)
s.set_grade('A')
print(s.get_grade())
```

A

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In [7]: class LoginSystem:
    def __init__(self, username, password):
        self.__username = username
        self.__password = password # private
```

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def login(self, user, pwd):
    if self.__username == user and self.__password == pwd:
        print(" Login Successful")
    else:
        print(" Invalid credentials")

def change_password(self, old_pwd, new_pwd):
    if self.__password == old_pwd:
        self.__password = new_pwd
        print(" Password changed successfully")
    else:
        print(" Incorrect old password")

user1 = LoginSystem("admin", "pass123")

user1.login("admin", "wrongpass")    # Invalid credentials
user1.login("admin", "pass123")      # Login Successful

user1.change_password("wrong", "new") # Incorrect old password
user1.change_password("pass123", "newpass") # Password changed successfully

user1.login("admin", "newpass")      #

```

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Invalid credentials
Login Successful
Incorrect old password
Password changed successfully
Login Successful

```

In [ ]:

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