

```
def add(a, b):  
    return a + b  
  
def subtract(a, b):  
    return a - b  
  
def multiply(a, b):  
    return a * b  
  
def divide(a, b):  
    if b == 0:  
        return "Error: Division by Zero"  
    return a / b  
  
print("Simple Calculator")  
print("1. Add\n2. Subtract\n3. Multiply\n4. Divide")  
  
choice = int(input("Enter choice (1-4): "))  
x = float(input("Enter first number: "))  
y = float(input("Enter second number: "))  
  
if choice == 1:  
    print("Result:", add(x, y))  
elif choice == 2:  
    print("Result:", subtract(x, y))  
elif choice == 3:  
    print("Result:", multiply(x, y))  
elif choice == 4:  
    print("Result:", divide(x, y))  
else:  
    print("Invalid Choice")
```

```
# Simple Data-Driven Test Script Demo
```

```
# Test data (username, password, expected result)
```

```
test_data = [  
    {"username": "user1", "password": "pass1", "expected": "Login Successful"},  
    {"username": "user1", "password": "wrong", "expected": "Invalid Credentials"},  
    {"username": "wrong", "password": "pass1", "expected": "Invalid Credentials"},  
    {"username": "", "password": "", "expected": "Username/Password required"}  
]
```

```
# Function to simulate login
```

```
def login(username, password):  
    # Hardcoded valid login  
    if username == "user1" and password == "pass1":  
        return "Login Successful"  
    elif username == "" or password == "":  
        return "Username/Password required"  
    else:  
        return "Invalid Credentials"
```

```
# Running tests with multiple data
```

```
for data in test_data:  
    result = login(data["username"], data["password"])  
  
    if result == data["expected"]:  
        print(f"PASS for {data}")  
    else:  
        print(f"FAIL for {data} | Got: {result}")
```