



onlinegdb.com/#



```
17 public String getRole() {
18     return "Medical Staff";
19 }
20
21 // Method overloading
22 public String scheduleAppointment(String patientName) {
23     return "Scheduling appointment for " + patientName;
24 }
25
26 public String scheduleAppointment(String patientName, String date) {
27     return "Scheduling appointment for " + patientName + " on " + date;
28 }
29
30 public String scheduleAppointment(String patientName, String date, String t
31     return "Scheduling appointment for " + patientName + " on " + date + "
32 }
33
34 @Override
35 public String displayInfo() {
36     return super.displayInfo() + String.format(", Staff ID: %s, Department:
37         staffId, department, hireDate);
38 }
39 }
```

input

Appointment rescheduled to 2023-10-21
Appointment rescheduled to 2023-10-26 at 3:00 PM

=== 8. UPDATE INFO OVERLOADING ===

Updated phone number for John Doe

Updated contact information for Mary Smith

=== 9. DETAILED INFORMATION ===

=== MEDICAL STAFF ===

Ronie Manaongsong: ronie@humanclinic.com, 555-1234, Martinez phase 11, DOB: 2005-05-15, Gender: Male, Staff ID: DOC001, Department: Cardiology, Hire Date: 2010-03-20, Specialization: Cardiologist, License: MD12345, Experience: 15 years
Dec Butong: Dec@humanclinic.com, 555-5678, Martinez phase 4, DOB: 1985-08-22, Gender: Male, Staff ID: NUR001, Department: Cardiology, Hire Date: 2015-06-10, Shift: Day, Registered: true

=== PATIENTS ===

John Doe: john@email.com, 555-9999, Manay, DOB: 1975-12-10, Gender: Male, Patient ID: PAT001, Blood Type: O+, Emergency Contact: Jane Doe (555-0000), Insurance: Blue Cross
John Doe has allergies to: Penicillin, Shellfish
Mary Smith: mary@email.com, 555-8888, New Address, DOB: 1988-07-03, Gender: Female, Patient ID: PAT002, Blood Type: A-, Emergency Contact: John Smith (555-1111), Insurance: Aetna
Mary Smith does not have allergies

```

17- public String getRole() {
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23-     return "Scheduling appointment for " + patientName;
24- }
25-
26- public String scheduleAppointment(String patientName, String date) {
27-     return "Scheduling appointment for " + patientName + " on " + date;
28- }
29-
30- public String scheduleAppointment(String patientName, String date, String time) {
31-     return "Scheduling appointment for " + patientName + " on " + date + " at " + time;
32- }
33-
34- }

```

input

```

=== HUMAN CLINIC SYSTEM - POLYMORPHISM DEMONSTRATION ===

=== 1. METHOD OVERRIDING (RUNTIME POLYMORPHISM) ===
Doctor specializing in Cardiology - Dr. Ronie Manaongsong is diagnosing patients in the Cardiology department.
Registered Nurse working Day shift - Nurse Dec Butong is providing patient care during the Day shift.
Patient (ID: PAT001) - PAT001 - John Doe is receiving medical treatment.
Patient (ID: PAT002) - PAT002 - Mary Smith is receiving medical treatment.

=== 2. METHOD OVERLOADING (COMPILE-TIME POLYMORPHISM) ===
Dr. Ronie Manaongsong is prescribing Aspirin
Dr. Ronie Manaongsong is prescribing Aspirin at dosage 100mg
Dr. Ronie Manaongsong is prescribing Aspirin at dosage 100mg for 30 days
Nurse Dec Butong is administering Insulin
Nurse Dec Butong is administering Insulin to Mary Smith
Nurse Dec Butong is administering 10 units of Insulin to Mary Smith

=== 3. DYNAMIC METHOD DISPATCH ===
Diagnosis Record: Generating diagnosis report for Angina (Severity: Moderate)
Treatment Plan Record: Generating treatment plan with 2 medications and 2 procedures
Consultation Appointment: Conducting consultation for: Follow-up for angina (Duration: 30 minutes)
Procedure Appointment: Performing procedure: Cardiac catheterization (Anesthesia: true, Recovery time: 30 mins)

=== 4. CONSTRUCTOR OVERLOADING ===
Simple person created: Test Person: Not provided, 555-9999, Not provided, DOB: 1990-01-01, Gender: Not specified

=== 5. CONTACT METHOD OVERLOADING ===
Contacting Ronie Manaongsong at ronie@humanclinic.com or 555-1234
Emailing Ronie Manaongsong at ronie@humanclinic.com
Calling Ronie Manaongsong at 555-1234

=== 6. SCHEDULING OVERLOADING ===
Scheduling appointment for Ronie
Scheduling appointment for Ronie on 2025-11-01
Scheduling appointment for Ronie on 2025-11-01 at 2:00 PM

=== 7. RESCHEDULE OVERLOADING ===
Appointment rescheduled to 2023-10-21
Appointment rescheduled to 2023-10-26 at 3:00 PM

=== 8. UPDATE INFO OVERLOADING ===
Updated phone number for John Doe
Updated contact information for Mary Smith

=== 9. DETAILED INFORMATION ===

=== MEDICAL STAFF ===
Ronie Manaongsong: ronie@humanclinic.com, 555-1234, Martinez phase 11, DOB: 2005-05-15, Gender: Male, Staff ID: DOC001, Department: Cardiology, Hire Date: 2010-03-20, Specialization: Cardiology, License: MD12345, Experience: 15 years
Nurse Dec Butong: Dec@humanclinic.com, 555-5678, Martinez phase 4, DOB: 1985-08-22, Gender: Male, Staff ID: NUR001, Department: Cardiology, Hire Date: 2015-06-10, Shift: Day, Registered: true

=== PATIENTS ===
John Doe: john@email.com, 555-9999, Manay, DOB: 1975-12-10, Gender: Male, Patient ID: PAT001, Type: Outpatient, Emergency Contact: Jane Doe (555-0000), Insurance: Blue Cross

```