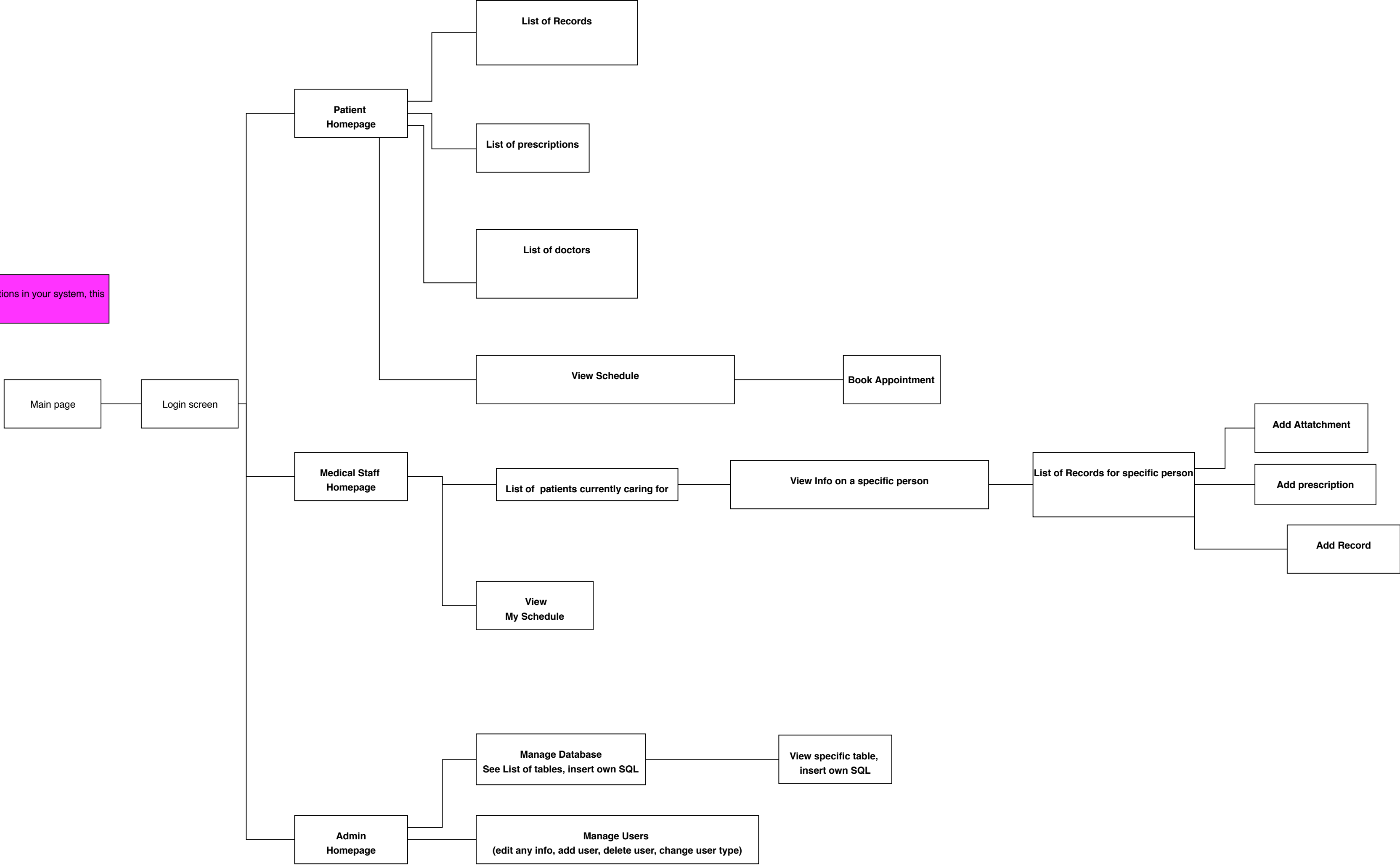
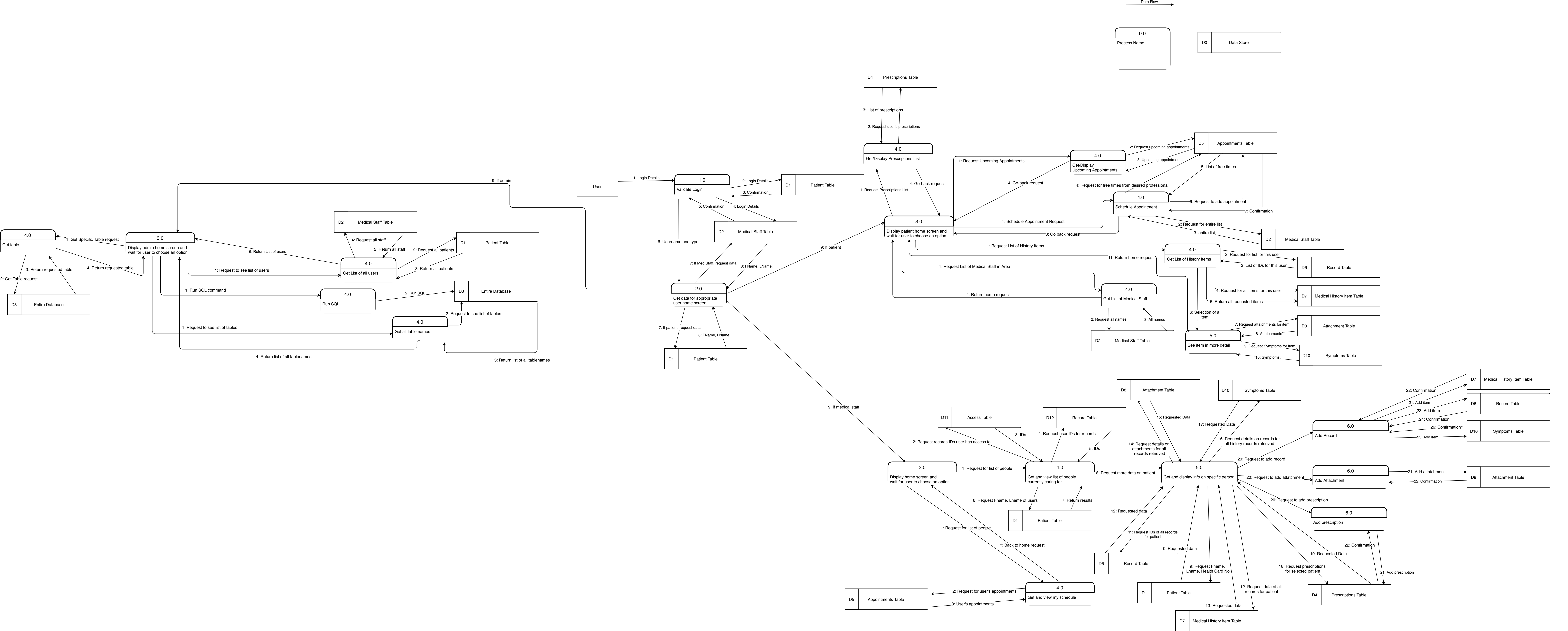


For the HIPO, you have to attach pseudo code for all functions in your system, this pseudo has to include SQL quires.





Function: Find a patient's list of medical records
Inputs: @Patient_SIN
Outputs: @RECORD.*
Pseudocode:
Connect to Database
Query = **SELECT * FROM RECORDS**
 WHERE @Patient_SIN = RECORDS.Patient_SIN

Parse Query
Execute Query
Close connection to Database

Function: View Institution calendar(Patient)
Inputs: @Inst_Name
Outputs: @DaysClosed
Pseudocode:
Connect to Database

Query = **SELECT** DaysClosed **FROM** Days Closed, Med Institution
 WHERE DaysClosed.MedInst_ID = Med Institution.MedInst_ID
 AND Med Institution.InstName = @InstName

Parse Query
Execute Query
Close connection to Database

Function: View Institution calendar(Doctor)
Inputs: @Inst_Name
Outputs: @DaysClosed
Pseudocode:
Connect to Database

Query = **SELECT** DaysClosed **FROM** Days Closed, Med Institution
 WHERE DaysClosed.MedInst_ID = Med Institution.MedInst_ID
 AND Med Institution.InstName = @InstName

Parse Query
Execute Query
Close connection to Database

Function: List Prescriptions(Patient)
Inputs: @Patient_SIN
Outputs: @presType, @presName, @length, @ Times_Renewable
Pseudocode:
Connect to Database

Query = **SELECT * FROM** Prescriptions **AS** P;
 WHERE P.Patient_SIN = @Patient_SIN

Parse Query
Execute Query
Close connection to Database

Function: Find the work schedule and work location of a medical professional
Inputs: @MedStaff_SIN
Outputs: WORK_PLACEMENT.dayWorking, WORK_PLACEMENT.workLocationName
Pseudocode:
Connect to Database
Query = **SELECT** dayWorking, workLocationName
 FROM WORK_PLACEMENT **AS** P
 WHERE @MedStaff_SIN = P.MedStaff_SIN

Parse Query
Execute Query
Close connection to Database

Function: Add Prescription(Prescription)
Inputs: @presType, @presName, @duration, @renewableFlag, @ID
Outputs: None
Pseudocode:
Connect to Database

Query = **INSERT INTO** Prescription **VALUES** (@presType, @presName, @duration, @renewableFlag, @ID);

Parse Query
Execute Query
Close connection to Database

Function: Check login details(Medical Staff)
Inputs:@Username, @Password
Outputs: @FName, @LName, @isAdmin
Pseudocode:
Connect to Database

Query = **SELECT** FName, LName, isAdmin
 FROM Medical Staff
 WHERE Medical Staff.Username = @Username, Medical Staff.Password = @Password

Parse Query
Execute Query
Close connection to Database

Function: Check login details(Patient)
Inputs:@Username, @Password
Outputs: @FName, @LName, @isAdmin
Pseudocode:
Connect to Database

Query = **SELECT** FName, LName, isAdmin
 FROM Patient
 WHERE Patient.Username = @Username, Patient.Password = @Password

Parse Query
Execute Query
Close connection to Database

Function: View Specific Table(Admin)
Inputs: @TableName
Outputs: @TableName.*
Pseudocode:
Connect to Database

Query = **SELECT * FROM** @TableName;

Parse Query
Execute Query
Close connection to Database

Function: Add Record(Doctor)
Inputs: @ID, @Date
Outputs: None
Pseudocode:
Connect to Database

Query = **INSERT INTO** Records **VALUES** (@ID, @Date);

Parse Query
Execute Query
Close connection to Database

Function: Add Attachment(Doctor)
Inputs: @docName, @Type, @Record_ID
Outputs: None
Pseudocode:
Connect to Database
Query = **INSERT INTO** Attachment **VALUES** (@Record_ID, @docName, @Type);
Parse Query
Execute Query
Close connection to Database

Function: Search patients by first and last name, and get all their information
Inputs: @PATIENT.FName, @PATIENT.LName
Outputs: PATIENT.*
Pseudocode:
Connect to Database

Query = **SELECT * FROM** PATIENT **AS** P1 **WHERE**
 P1.FName = @FName **AND** P1.LName = @LName;

Parse Query
Execute Query
Close connection to Database

Function: Get all medical history items for a given user (requires multiple tables)
Inputs: @Patient_SSN
Outputs: Med_Hist_ID, Diagnosis, Recommended treatment, Notes
Pseudocode:
Connect to Database

Query = **SELECT** Med_Hist_ID, Diagnosis, Recommended treatment, Notes
 FROM Record **AS** R, Medical History Item **AS** MHI
 WHERE R.Patient_SIN = @Patient_SIN
 AND MHI.Record_ID = R.Record_ID

Parse Query
Execute Query
Close connection to Database

Function: Get complete list of users
Inputs: none
Outputs: users
Pseudocode:
Connect to Database

Query = **SELECT** FName, LName, isAdmin **FROM** Patients, Medical Staff
Parse Query
Execute Query
Close connection to Database

Function: Get Future Appointments
Inputs:@Patient_SSN, @Current_Date
Outputs: @appointmentType, @Date, @Start_Time, @End_Time
Pseudocode:
Connect to Database

Query = **SELECT** appointmentType, Date, Start_Time, End_Time
 FROM Appointment
 WHERE Appointment.Patient_SIN = @Patient_SSN
 AND Appointment.Date >= @Current_Date

Parse Query
Execute Query
Close connection to Database

Function: Get list of patients that given medical staff has access to
Inputs:@MedStaff_SIN
Outputs: FName, LName
Pseudocode:
Connect to Database

Query = **SELECT** FName, LName,
 FROM Patient **as** P
 WHERE EXISTS (RECORD **AS** R **AND** ACCESS **AS** A **AND** P.patient_SIN = R.Patient_SIN **AND** A.MedStaff_SIN = @MedStaff_SIN **AND** A.RECORD_ID = R.Record_ID)

Parse Query
Execute Query
Close connection to Database

Function: Get FName, LName of all medical professionals
Inputs: None
Outputs: @FName, @LName
Pseudocode:
Connect to Database

Query = **SELECT** FName, LName **FROM** Medical Staff

Parse Query
Execute Query
Close connection to Database

Function: Get attachments and symptoms for a given medical history item
Inputs: @Med_Hist_ID
Outputs: DocName, Type, Symptom
Pseudocode:
Connect to Database

Query = **SELECT** DocName, Type
 FROM Attachment **AS** A, Medical History Item **AS** MHI
 WHERE A.Record_ID = MHI.Record_ID
 AND MHI.Med_Hist_ID = @Med_Hist_ID

Parse Query
Execute Query

Query2 = **SELECT** Symptom
 FROM Med Hist Symptoms **AS** MHS, Medical History Item **AS** MHI
 WHERE MHS.Med_Hist_ID= @Med_Hist_ID

Parse Query
Execute Query
Close connection to Database

Function: Get all data for a given patient
Inputs: @patient_SIN
Outputs: MedHistoryItem.diagnosis, MedHistoryItem.recommendedTreatment, MedHistoryItem.notes
Prescription.presType, Prescription.presName, Prescription.length, Prescription.timesRenewable, MedHistSymptoms. symptom
Pseudocode:
Connect to Database

Query = **SELECT** MedHistoryItem.diagnosis, MedHistoryItem.recommendedTreatment, MedHistoryItem.notes, Record.Date,
Prescription.presType, Prescription.presName, Prescription.length, Prescription.timesRenewable, MedHistSymptoms. symptom,
Insurance.coverage
 FROM MedHistoryItem, Prescription, MedHistSymptoms, Records, Insurance
 WHERE @patient_SIN = Record.patient_SIN **AND** Record.Record_ID = MedHistoryItem.Record_ID
 AND MedHistSymptoms.medHist_ID = MedHistoryItem.MedHistItem_ID **AND** Prescription.Patient_SIN = @patient_SIN
 AND @patient_SIN = Insurance.Patient_SIN

Parse Query
Execute Query
Close connection to Database

Function: Get list of all tables in the database
Inputs: none
Outputs: information_scheme.tables.table_name.*
Pseudocode:
Connect to Database

Query = **SELECT** table_name **FROM** information_schema.tables **WHERE** table_schema ='Medical Database';
Parse Query
Execute Query
Close connection to Database

Function: Get appointments for a given medical professional
Inputs:@MedStaff_SSN,
Outputs: appointmentType, Date, Start_Time, End_Time
Pseudocode:
Connect to Database

Query = **SELECT** appointmentType, Date, Start_Time, End_Time
 FROM Appointment
 WHERE Appointment.MedStaff_SSN= @MedStaff_SSN

Parse Query
Execute Query
Close connection to Database

Function: Add appointment to appointments table, given all info
@MedStaff_SSN, @appointmentType, @Date, @Start_Time, @End_Time
Outputs: None
Pseudocode:
Connect to Database

Query = **INSERT INTO** Appointment **VALUES** (@Inst_Name, @Patient_SSN
@MedStaff_SSN, @appointmentType, @Date, @Start_Time, @End_Time)

Parse Query
Execute Query
Close connection to Database