Tables for Hospital Management System

-- Create tables for Hospital Management System

-- PATIENT table
```
CREATE TABLE PATIENT (
    patient_id INT PRIMARY KEY,
    name VARCHAR(100) NOT NULL,
    date_of_birth DATE NOT NULL,
    age INT,
    phone_number VARCHAR(20),
    gender VARCHAR(10),
    disease VARCHAR(200),
    checkup_date DATE
);
```

-- DOCTOR table
```
CREATE TABLE DOCTOR (
    doctor_id INT PRIMARY KEY,
    name VARCHAR(100) NOT NULL,
    qualification VARCHAR(200),
    specialization VARCHAR(100),
    contact_number VARCHAR(20)
);
```

-- INPATIENT table (subclass of PATIENT)
```
CREATE TABLE INPATIENT (
    patient_id INT PRIMARY KEY,
    admission_date DATE NOT NULL,
    discharge_date DATE,
    ward_id INT,
    FOREIGN KEY (patient_id) REFERENCES PATIENT(patient_id),
    FOREIGN KEY (ward_id) REFERENCES WARD(ward_id)
);
```

-- OUTPATIENT table (subclass of PATIENT)
```
CREATE TABLE OUTPATIENT (
    patient_id INT PRIMARY KEY,
```

```sql
    visit_date DATE NOT NULL,
    next_appointment_date DATE,
    treatment_details VARCHAR(500),
    FOREIGN KEY (patient_id) REFERENCES PATIENT(patient_id)
);

-- WARD table
CREATE TABLE WARD (
    ward_id INT PRIMARY KEY,
    ward_name VARCHAR(50) NOT NULL,
    ward_type VARCHAR(50),
    capacity INT,
    status VARCHAR(20),
    charge_per_day FLOAT
);

-- NURSE table
CREATE TABLE NURSE (
    nurse_id INT PRIMARY KEY,
    name VARCHAR(100) NOT NULL,
    qualification VARCHAR(200),
    contact_number VARCHAR(20),
    shift VARCHAR(20),
    ward_id INT,
    FOREIGN KEY (ward_id) REFERENCES WARD(ward_id)
);

-- Junction table for WARD and NURSE (WARD_NURSE)
CREATE TABLE WARD_NURSE (
    ward_id INT,
    nurse_id INT,
    assignment_date DATE NOT NULL,
    PRIMARY KEY (ward_id, nurse_id),
    FOREIGN KEY (ward_id) REFERENCES WARD(ward_id),
    FOREIGN KEY (nurse_id) REFERENCES NURSE(nurse_id)
);

-- MEDICAL_TEST table
CREATE TABLE MEDICAL_TEST (
    test_id INT PRIMARY KEY,
```

```sql
    patient_id INT,
    doctor_id INT,
    test_date DATE,
    test_name VARCHAR(100),
    test_results VARCHAR(500),
    cost FLOAT,
    FOREIGN KEY (patient_id) REFERENCES PATIENT(patient_id),
    FOREIGN KEY (doctor_id) REFERENCES DOCTOR(doctor_id)
);

-- PRESCRIPTION table
CREATE TABLE PRESCRIPTION (
    prescription_id INT PRIMARY KEY,
    patient_id INT,
    doctor_id INT,
    medicine_name VARCHAR(100),
    medicine_quantity INT,
    dosage VARCHAR(100),
    prescribed_date DATE,
    FOREIGN KEY (patient_id) REFERENCES PATIENT(patient_id),
    FOREIGN KEY (doctor_id) REFERENCES DOCTOR(doctor_id)
);

-- Junction table for PATIENT and DOCTOR (PATIENT_DOCTOR)
CREATE TABLE PATIENT_DOCTOR (
    patient_id INT,
    doctor_id INT,
    visit_date DATE,
    diagnosis VARCHAR(500),
    PRIMARY KEY (patient_id, doctor_id),
    FOREIGN KEY (patient_id) REFERENCES PATIENT(patient_id),
    FOREIGN KEY (doctor_id) REFERENCES DOCTOR(doctor_id)
);

-- BILL table
CREATE TABLE BILL (
    bill_id INT PRIMARY KEY,
    patient_id INT,
    doctor_id INT,
    bill_date DATE,
```

```
        doctor_fee FLOAT,
        room_charge FLOAT,
        test_charge FLOAT,
        total_amount FLOAT,
        FOREIGN KEY (patient_id) REFERENCES PATIENT(patient_id),
        FOREIGN KEY (doctor_id) REFERENCES DOCTOR(doctor_id)
);
```