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Assignment #1:

SELECT Medication,

    COUNT(PatientID) AS NumberOfPatients,

    CASE

        WHEN ExpiryDate < GETDATE() THEN 'Expired'

        ELSE 'Active'

    END AS Status

FROM MedicationPrescriptions

GROUP BY Medication;

Query 2:

SELECT Doctor.Name, Department.Name, Patient.Name

FROM Doctor

JOIN Appointment ON Doctor.ID = Appointment.DoctorID

JOIN Patient ON Appointment.PatientID = Patient.ID

WHERE Patient.Age > 12

AND YEAR(Doctor.LastAttended) != 2022

ORDER BY Doctor.Name DESC, Patient.Name ASC;

Assignment #2: Webpage with PDF Generation

HTML (index.html):

html

<!DOCTYPE html>

<html>

<head>

  <title>Form Submission</title>

```html
</head>
<body>
    <form id="dataForm">
        Full Name: <input type="text" name="fullname"><br>
        Email: <input type="text" name="email"><br>
        Phone Number: <input type="text" name="phone"><br>
        <button type="submit">Submit</button>
    </form>
    <script src="script.js"></script>
</body>
</html>
```

JavaScript (script.js):

```javascript
document.getElementById('dataForm').addEventListener('submit', function(e) {
    e.preventDefault();
    const formData = new FormData(this);
    fetch('/submit', {
        method: 'POST',
        body: formData
    }).then(response => response.blob())
    .then(blob => {
        const url = window.URL.createObjectURL(blob);
        window.open(url, '_blank');
    });
});
```

Python (app.py):

```python
from flask import Flask, request, send_file
import io
```

```python
import qrcode

app = Flask(__name__)

@app.route('/submit', methods=['POST'])

def submit():

    data = request.form.to_dict()

    qr = qrcode.QRCode(version=1, box_size=10, border=5)

    qr.add_data(str(data))

    qr.make(fit=True)

    img = qr.make_image(fill='black', back_color='white')

    pdf = io.BytesIO()

    img.save(pdf, "PDF")

    pdf.seek(0)

    return send_file(pdf, attachment_filename="data.pdf", as_attachment=True)


if __name__ == '__main__':

    app.run(debug=True)
```