Brief
I used mySQL and MySQLWorkbench for the project. This was to help me work efficiently with a GUI and also with SQL queries as I am more familiar with Workbench than XAMPP. The address of each owner and staff members needs to be added first. Both tables have *address_id* as a non-null field. Records cannot be reliably added without an existing *address_id*.
          I created the views *today* and *open_appointments_today*. For the purposes of the assignment *today* and *open_appointments_today* is set to April 2023. In a production environment this can be changed to dynamically update by getting todays date and comparing that against the *date_time* value. The contents of the views can be updated which in turn updates the corresponding table. For example, you could update the *isCancelled* value of an appointment in the *today* view. This would then remove it from the *open_appointments_today* view.

Implementation
1) Create a schema in your DBMS of choice.
2) Import the file `G00296371 Schema Structure.sql` to add the table structure.
3) Verify the tables have been added successfully.
4) Import the file `G00296371 Schema Data.sql` to add the test data to the tables.
5) Verify the table data has been added successfully.

Note
If you encounter a **#1273 – Unknown collation** error you may need to update all occurrences of **COLLATE** to `utf8mb4_unicode_ci` to ensure compatibility. The files have already been updated and I was able to import them to XAMPP with no issues.

Tables
• Addresses - Acts as the single source of info for owners and staff added to the database. Other tables are based of the information in addresses.
• Animals - Holds all information related to animals.
• Appointments - Holds all information related to appointments.
• Owners - Holds all information about the owners of the animals being brought to the practise.
• Payment Line Items - Individual line items for payments
• Payments - Payment amount, status and owner information
• Staff - Holds all information for active and inactive staff
• Treatment Guide - A general reference guide staff can use when creating treatments and payments
• Treatments - Holds all information on treatments for specific animals for appointments

Views
Today - All appointments, including cancelled ones, for "today" April 2023
Open Appointments Today - All appointments, only confirmed ones, for "today" April 2023

Foreign Keys
Addresses - no Foreign Keys
Animals - animal_owner connected owners and animals tables: owner_id to owners.id
Appointments - appointment_animal connected animals and appointments tables: animal_id to animals.id, appointment_payment connects payments and appointments tables: payment_id to payments.id, appointment_vet connects staff and appointments tables: with_vet to staff.id
Owners - owner_address connects addresses and owners tables: address_id to addresses.id, owner_animal connects animals and owners tables: animal_id to animals.id
Payment line items - payments_line_item connects payments and payment line items tables: payment_id to payments.id
Payments - payment_for_appointment connects appointments and payments tables: appointment_id to appointments.id, payment_for_owner connects owners and appointments tables: owner_id to owners.id
Staff - address_id connects staff and addresses tables: address_id to addresses.id
Treatment Guide - no FKs
Treatments - treatment_animal connects animals and treatments tables: animal_id to animals.id, treatment_appointment connects appointments and treatments tables: appointment_id to appointments.id