CREATE VIEW EXQ1

AS SELECT AVG(Amount)

FROM (SELECT \* FROM (SELECT \* FROM Patient, Appointment), Invoice)

WHERE Cancelled = FALSE;

DESCRIPTION:

This relational algebra and SQL code represent the patient info with their uncanceled appointments, and the average amount paid for each. This code consists of one cross product, one JOIN, and one function.

CREATE VIEW EXQ2

AS SELECT Allergy.allergy\_name, Count(Distinct PersonID)

FROM (SELECT \* FROM Patient, Patient\_Allergy\_Join

WHERE Patient.PersonID = Patient\_Allergy\_Join.PersonID), Allergy

WHERE Allergy.allergy\_name = Allergy.allergy\_name;

DESCRIPTION:

This relational algebra and SQL code show the count of allergies type each patient has. This SQL code consists of two JOINs and one function.

CREATE VIEW EXQ3

AS SELECT SUM(Amount)

FROM Invoice

WHERE DateIssued BETWEEN '2022/01/01' AND '2022/12/31';

DESCRIPTION:

This relational algebra and SQL code give the total payments in the past year (2021). It consists of one PROJECT and one function.