NUID 2nd Last Digit ending in 1 or 6
Your NUID:

Question 1 (6 points)
The Universal Healthcare's mission is to provide essential healthcare to the low-income population. It has many clinics at different locations and employs thousands of employees. A clinic has an on-site pharmacy and an on-site lab. A clinic may have many medical professionals. A medical professional may work at several clinics. The support personnel are deployed across the clinics.

Please design a relational database based on the business requirements below to help the Universal Healthcare maximize its operation efficiency. Normalize the design to the 3rd Norma Form. Create the ERD in your design tool. Submit the ERD.

Clinic Operations
1) Store the patient information
2) Store the doctor information
3) Track patient appointments with doctors
4) Track specialties of doctors. Specialties include Family, Internal Medicine, OB, etc.
5) Track nurse assignments for patient appointments
6) Track the clinic of a patient appointment

Question 2 (2 points)
Use the embedding technique to design a single MongoDB document which contains the data below. Submit the design in JSON format.

CustomerID	AccountNumber	SalesOrderID	OrderValue
30000	10-4020-000245	46645	114198
30000	10-4020-000245	51124	87230
30000	10-4020-000245	55275	72873

```
-- Question 3 (2 points)

/* Using the content of an AdventureWorks database, write
   a query to retrieve the customers who have purchased more than
   ten different products and never purchased the same product.
   Sort the returned data by the total number of different
   products purchased by a customer in the descending order.
   Include the “customer id” and “total number of different
   products purchased by a customer” columns in the report. */




-- Question 4 (2 points)

/* Write a query to retrieve the dates in which there was
   at least one product sold but no product in red
   was sold.

   Return the "date" and "total product quantity sold
   for the date" columns.

   Sort the returned data by the
   "total product quantity sold for the date" column in desc. */




-- Question 5 (3 points)

/*
Write a query to retrieve a salesperson's most valuable order.
The most valuable order has the highest totaldue amount. The totaldue
amount is stored in the SalesOrderHeader table. If there is a tie,
the tie needs to be retrieved.

Return the salesperson's id, last name, first name, the order id and
totaldue value, and the total order quantity for the order.
Exclude orders that don't have a salesperson specified.
Sort the returned data by the salesperson's id.
*/
```