Requirements

I will be building a database system to support a chain of retail stores, like Kroger or Target.

Users will be managers of the stores. They must be able to manage store locations, information on employees and which locations they are assigned to, and information on products and which stores stock them.

For each employee, the database should store their:
- ID
- Name
- Address
- Salary
- Phone numbers
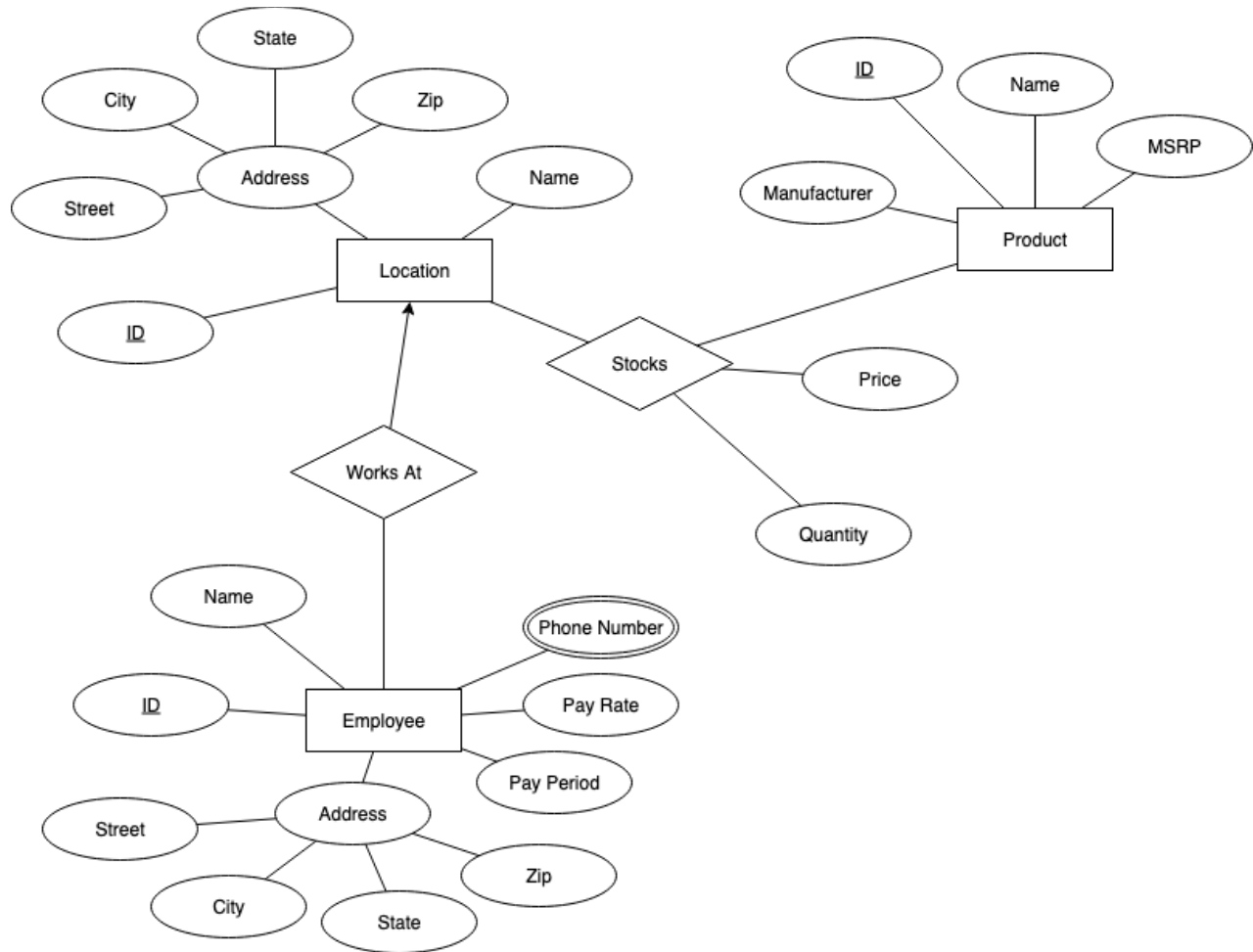- Store they're assigned to

For each store, the database should store its:
- ID
- Name
- Address

For each product, the database should store its:
- ID
- Name
- Manufacturer
- MSRP
- What stores are stocking it
- The quantity at each store
- The price it's being sold for at each store

ER Diagram

Schemas

Locations(loc_id, loc_name, loc_street, loc_city, loc_state, loc_zip) PK: loc_id

Employees(emp_id, emp_name, emp_street, emp_city, emp_state, emp_zip, emp_payrate, emp_payperiod, emp_location) PK: emp_id, FK: emp_location (is Locations.loc_id)

Products(prod_id, prod_name, prod_manufacturer, prod_msrp) PK: prod_id

EmployeePhoneNumbers(emp_id, phone_number) PK: (emp_id, phone_number), FK: emp_id

Stocks(loc_id, prod_id, price, quantity) PK: (loc_id, prod_id), FKs: loc_id, prod_id

Multi-Table Query

Display the names of all in-stock products being sold at a price higher than their MSRP

SELECT Products.prod_name
FROM Stocks INNER JOIN Products ON Stocks.prod_id = Products.prod_id
WHERE Stocks.quantity > 0 AND Stocks.price > Products.prod_msrp
ORDER BY Stocks.price DESC