Homework 4

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**Single entity**

1. Report those payments greater than $100,000.

SELECT \* FROM Payments

WHERE amount > 100000;

1. List the products in each product line.

SELECT \* FROM Products

ORDER BY productLine;

1. How many products in each product line?

SELECT productLine, COUNT(\*) AS countProductline

FROM Products

GROUP BY productLine;

1. What is the minimum payment received?

SELECT MIN(amount) AS minimumPayment

FROM Payments;

1. List all payments greater than twice the average payment.

SELECT \* FROM Payments

WHERE amount > 2 \* (SELECT AVG(amount) FROM Payments);

**One to many relationship**

1. How many orders have been placed by Herkku Gifts?

SELECT COUNT(orderNumber) AS herkkuGiftsTotalOrders

FROM Orders, Customers

WHERE Orders.customerNumber = Customers.customerNumber

AND Customers.customerName = 'Herkku Gifts';

1. Who are the employees in Boston?

SELECT employeeNumber, firstName, lastName

FROM Employees, Offices

WHERE Employees.officeCode = Offices.officeCode

AND city = 'Boston';

1. Report those payments greater than $100,000. Sort the report so the customer who made the highest payment appears first.

SELECT Payments.customerNumber, customerName, amount

FROM Payments, Customers

WHERE Payments.customerNumber = Customers.customerNumber

AND amount > 100000

ORDER BY amount DESC;

1. List the value of 'On Hold' orders.

SELECT quantityOrdered \* priceEach AS OnHoldvalue

FROM Orders, OrderDetails

WHERE Orders.orderNumber = OrderDetails.orderNumber

AND status = 'On Hold';

j. Report the number of orders 'On Hold' for each customer.

SELECT customerName, COUNT(orderNumber) AS OnHoldItem

FROM Customers, Orders

WHERE Customers.customerNumber = Orders.customerNumber

AND status = 'On Hold'

GROUP BY customerName;

**Many to many relationship**

1. List those orders containing items sold at less than the MSRP.

SELECT orderNumber, priceEach, MSRP

FROM OrderDetails, Products

WHERE OrderDetails.productCode = Products.productCode

AND buyPrice < MSRP;

1. Reports those products that have been sold with a markup of 100% or more (i.e., the priceEach is at least twice the buyPrice)

SELECT productName, priceEach, buyPrice

FROM Products, OrderDetails

WHERE Products.productCode = OrderDetails.productCode

AND priceEach > 2 \* buyPrice;

m. List the products ordered on a Monday.

SELECT DISTINCT(productName)

FROM Orders, OrderDetails, Products

WHERE Orders.orderNumber = OrderDetails.orderNumber

AND OrderDetails.productCode = Products.productCode

AND DATENAME(WEEKDAY, orderDate) = 'MONDAY';

n. What is the quantity on hand for products listed on 'On Hold' orders?

SELECT Products.productCode, productName, quantityInStock

FROM Products, OrderDetails, Orders

WHERE Orders.orderNumber = OrderDetails.orderNumber

AND OrderDetails.productCode = Products.productCode

AND status = 'On Hold';