Assignment 1 : Simple SQL Query with a single table with where clause

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Northwind database
Sample table :Products
-ProductID
-ProductName
-SupplierID
-CategoryID
-QuantityPerUnit
-UnitPrice
-UnitsInStock
-UnitsOnOrder
-ReorderLevel
-Discontinued

1. Write a query to get a Product list (id, name, unit price) where current products cost less than $20.
2. Write a query to get Product list (id, name, unit price) where products cost between $15 and $25
3. Write a query to get Product list (name, unit price) of above average price.
4. Write a query to get Product list (name, unit price) of ten most expensive products
5. Write a query to count current and discontinued products
6. Write a query to get Product list (name, units on order , units in stock) of stock is less than the quantity on order

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Assignment 2 : Retrieve data using join with where clause

Sample table1: salesman
-salesman_id
-name
-city
-commission
Sample table2: customer
-customer_id
-cust_name
-city
-grade
-salesman_id
Sample table3: orders
-ord_no
-purch_amt
-ord_date
-customer_id
-salesman_id

1. write a SQL query to find the salesperson and customer who reside in the same city. Return Salesman, cust_name and city

2. write a SQL query to find those orders where the order amount exists between 500 and 2000. Return ord_no, purch_amt, cust_name, city
3. write a SQL query to find the salesperson(s) and the customer(s) he represents. Return Customer Name, city, Salesman, commission
4. write a SQL query to find salespeople who received commissions of more than 12 percent from the company. Return Customer Name, customer city, Salesman, commission.
5. write a SQL query to locate those salespeople who do not live in the same city where their customers live and have received a commission of more than 12% from the company. Return Customer Name, customer city, Salesman, salesman city, commission
6. write a SQL query to find the details of an order. Return ord_no, ord_date, purch_amt, Customer Name, grade, Salesman, commission
7. Write a SQL statement to join the tables salesman, customer and orders so that the same column of each table appears once and only the relational rows are returned.
8. write a SQL query to display the customer name, customer city, grade, salesman, salesman city. The results should be sorted by ascending customer_id.
9. write a SQL query to find those customers with a grade less than 300. Return cust_name, customer city, grade, Salesman, salesmancity. The result should be ordered by ascending customer_id.
10. Write a SQL statement to make a report with customer name, city, order number, order date, and order amount in ascending order according to the order date to determine whether any of the existing customers have placed an order or not
11. Write a SQL statement to generate a report with customer name, city, order number, order date, order amount, salesperson name, and commission to determine if any of the existing customers have not placed orders or if they have placed orders through their salesman or by themselves
12. Write a SQL statement to generate a list in ascending order of salespersons who work either for one or more customers or have not yet joined any of the customers
13. write a SQL query to list all salespersons along with customer name, city, grade, order number, date, and amount.
14. Write a SQL statement to make a list for the salesmen who either work for one or more customers or yet to join any of the customers. The customer may have placed, either one or more orders on or above order amount 2000 and must have a grade, or he may not have placed any order to the associated supplier.
15. Write a SQL statement to generate a list of all the salesmen who either work for one or more customers or have yet to join any of them. The customer may have placed one or more orders at or above order amount 2000, and must have a grade, or he may not have placed any orders to the associated supplier.
16. Write a SQL statement to generate a report with the customer name, city, order no. order date, purchase amount for only those customers on the list who must have a grade and placed one or more orders or which order(s) have been placed by the customer who neither is on the list nor has a grade.
17. Write a SQL query to combine each row of the salesman table with each row of the customer table
18. Write a SQL statement to create a Cartesian product between salesperson and customer, i.e. each salesperson will appear for all customers and vice versa for that salesperson who belongs to that city

19. Write a SQL statement to create a Cartesian product between salesperson and customer, i.e. each salesperson will appear for every customer and vice versa for those salesmen who belong to a city and customers who require a grade
20. Write a SQL statement to make a Cartesian product between salesman and customer i.e. each salesman will appear for all customers and vice versa for those salesmen who must belong to a city which is not the same as his customer and the customers should have their own grade

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Assignment 3 : Retrieve data using Group By clause

Sample table1:Department
-dept_id
-dept_name
Sample table2: Employee
-emp_id
-dept_id
-mngr_id
-emp_name
-salary

1. write a SQL query to find Employees who have the biggest salary in their Department
2. write a SQL query to find Departments that have less than 3 people in it
3. write a SQL query to find All Department along with the number of people there
4. write a SQL query to find All Department along with the total salary there

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Assignment 4 : Create Stored procedure in Northwind database to insert or update a record in a table

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1. Create a stored procedure in the Northwind database that will calculate the average value of Freight for a specified customer.Then, a business rule will be added that will be triggered before every Update and Insert command in the Orders controller,and will use the stored procedure to verify that the Freight does not exceed the average freight. If it does, a message will be displayed and the command will be cancelled.
2. write a SQL query to Create Stored procedure in the Northwind database to retrieve Employee Sales by Country
3. write a SQL query to Create Stored procedure in the Northwind database to retrieve Sales by Year
4. write a SQL query to Create Stored procedure in the Northwind database to retrieve Sales By Category
5. write a SQL query to Create Stored procedure in the Northwind database to retrieve Ten Most Expensive Products
6. write a SQL query to Create Stored procedure in the Northwind database to insert Customer Order Details
7. write a SQL query to Create Stored procedure in the Northwind database to update Customer Order Details