Jane Mpho Kuali

SQL Practical Answers

Question 1

1.1.

```sql
SELECT client_name, department
FROM ClientInfo
JOIN Company ON ClientInfo.Client_ID = Company.Client_ID;
```

1.2.

Left outer join where ClientInfo is the left table and Company is the right table:

```sql
SELECT *
FROM ClientInfo
LEFT JOIN Company ON ClientInfo.Client_ID = Company.Client_ID;
```

1.3.1.

```sql
SELECT employee_name, manager_id
FROM Table
```

1.3.2. Pieter is the boss since he/she does not have a manager "null".

Question 2

```sql
SELECT SUM(case when S >= 0 then S else 0 end) as Positve_Sum,
       SUM(case when S < 0 then S else 0 end) as Negative_Sum
FROM S
```

Question 3

```sql
SELECT employee_name, age
FROM Department e1
WHERE 3 =
      (SELECT COUNT(DISTINCT Age)
       FROM Department e2
       WHERE e2.Age > e1.Age);
```

Question 4

```sql
CREATE TABLE Table1 (
      Model_ID                INTEGER PRIMARY KEY,
      Make                    varchar(20),
      Model                   varchar(20),
      Manufacture_Date        DATE,
      Cost                    DECIMAL(10,2)
```

```
        );

CREATE TABLE Table2 (
        Manufacturer              varchar(25),
        Model_ID                  INTEGER,
        Parts                     varchar(25),
        Warranty_Expire_Date      DATE,
        City                      varchar(25),
        FOREIGN KEY(Model_ID)
        REFERENCES Table1(Model_ID)
        );

INSERT INTO [dbo].[Table1]
        (Model_ID,Make, Model,Manufacture_Date,Cost)

    VALUES
        (1,'BMW','Sedan','2009-01-18',890000.00),
            (2,'Toyota','Hatchback','1999-12-23',570000.00),
            (3,'Hyandai','SUV','2008-07-29',690000.00),
            (4,'Volkswagen','Wagon','2023-05-23',750000.00),
            (5,'Ford','Convertible','2022-04-25',480000.00)
GO

INSERT INTO [dbo].[Table2]
        (Manufacturer,Model_ID,Parts,Warranty_Expire_Date,City)
    VALUES
        ('BMW',1,'All of them','2022-01-25','Joburg'),
            ('Toyota',2,'Some of them','2025-09-30','Durban'),
            ('Hyundai',3,'Engine','2030-01-31','Cape Town'),
            ('Volkswagen',4,'Windscreen','2045-01-31','Pretoria'),
            ('Ford',5,'Side mirrors','2027-10-23','Potchefstroom')
GO
```

Question 5

5.1.

```
DROP TABLE #temporary_table
SELECT Make, Model, Cost, Manufacture_Date, Parts, Warranty_Expire_Date
INTO #temporary_table
FROM Table2
JOIN Table1 ON Table1.Model_ID = Table2.Model_ID;
```

5.2.

To fix the error, we have to drop the table first before storing any data to it just in case the table exists with the keyword 'DROP TABLE #temporary_table'.

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Question 6

```sql
SELECT *
FROM OPENQUERY (Vicidial, 'SELECT * FROM Users');
```