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-- Soal Pendahuluan Nomor 1
CREATE TABLE Customer (
  ID_Customer char(6) NOT NULL,
  Nama_Customer varchar(100) NOT NULL,
  PRIMARY KEY (ID_Customer)
);

CREATE TABLE Menu_Minuman (
  ID_Minuman char(6) NOT NULL,
  Nama_Minuman varchar(50) NOT NULL,
  Harga_Minuman float(10,2) NOT NULL,
  PRIMARY KEY (ID_Minuman)
);

CREATE TABLE Pegawai (
  NIK char(16) NOT NULL,
  Nama_Pegawai varchar(100) NOT NULL,
  Jenis_Kelamin char(1) NOT NULL,
  Email varchar(50) NOT NULL,
  Umur int NOT NULL,
  PRIMARY KEY (NIK)
);

CREATE TABLE Nomor_Telepon_Pegawai (
  No_Telp_Pegawai varchar(15) NOT NULL,
  Pegawai_NIK char(16) NOT NULL,
  PRIMARY KEY (No_Telp_Pegawai),
  FOREIGN KEY (Pegawai_NIK) REFERENCES Pegawai (NIK)
);

CREATE TABLE Transaksi (
  ID_Transaksi char(10) NOT NULL,
  Tanggal_Transaksi date NOT NULL,
  Metode_Pembayaran varchar(15) NOT NULL,
  Customer_ID_Customer char(6) NOT NULL,
  Pegawai_NIK char(16) NOT NULL,
  PRIMARY KEY (ID_Transaksi),
  ADD CONSTRAINT transaksi_ibfk_1 FOREIGN KEY
(Customer_ID_Customer) REFERENCES Customer (ID_Customer),
  FOREIGN KEY (Pegawai_NIK) REFERENCES Pegawai (NIK)
);

CREATE TABLE Transaksi_Minuman (
  TM_Transaksi_ID char(10) NOT NULL,
  TM_Menu_Minuman_ID char(6) NOT NULL,
  Jumlah_Cup int NOT NULL,
  PRIMARY KEY (TM_Transaksi_ID,TM_Menu_Minuman_ID),
  FOREIGN KEY (TM_Menu_Minuman_ID) REFERENCES Menu_Minuman
(ID_Minuman),
  FOREIGN KEY (TM_Transaksi_ID) REFERENCES Transaksi
(ID_Transaksi)
);

CREATE TABLE Membership (
  ID_Membership CHAR(6) NOT NULL,
  No_Telepon_Customer VARCHAR(15) NOT NULL,
  Alamat_Customer VARCHAR(100) NOT NULL,
  Tanggal_Pembuatan_Kartu_Membership DATE NOT NULL,
  Tanggal_Kedaluwarsa_Kartu_Membership DATE,
  Total_Poin INT NOT NULL,
  Customer_ID_Customer CHAR(6) NOT NULL
);

-- Soal Pendahuluan Nomor 2
ALTER TABLE Membership ADD PRIMARY KEY (ID_Membership);

ALTER TABLE Membership
ADD FOREIGN KEY (Customer_ID_Customer) REFERENCES
Customer(ID_Customer)
ON UPDATE CASCADE
ON DELETE NO ACTION;

ALTER TABLE Transaksi
DROP FOREIGN KEY transaksi_ibfk_1,
ADD FOREIGN KEY (Customer_ID_Customer)
REFERENCES Customer (ID_Customer)
ON DELETE CASCADE
ON UPDATE CASCADE;

ALTER TABLE Membership
ALTER COLUMN Tanggal_Pembuatan_Kartu_Membership SET DEFAULT
CURRENT_DATE;

ALTER TABLE Membership
ADD CHECK (total_poin >= 0);

ALTER TABLE Membership
MODIFY Alamat_Customer VARCHAR(150);

-- Soal Pendahuluan Nomor 3
DROP TABLE Nomor_Telepon_Pegawai;

ALTER TABLE Pegawai
ADD COLUMN Nomor_Telp_Pegawai VARCHAR(15) NOT NULL;

-- Soal Pendahuluan Nomor 4
INSERT INTO Customer (ID_Customer, Nama_Customer)
VALUES
('CTR001', 'Budi Santoso'),
('CTR002', 'Sisil Triana'),
('CTR003', 'Davi Liam'),
('CTR004', 'Sutris Ten An'),
('CTR005', 'Hendra Asto');

INSERT INTO Membership (ID_Membership, No_Telepon_Customer,
Alamat_Customer, Tanggal_Pembuatan_Kartu_Membership,
Tanggal_Kedaluwarsa_Kartu_Membership, Total_Poin,
Customer_ID_Customer)
VALUES
('MBR001', '08123456789', 'Jl. Imam Bonjol', '2023-10-24',
'2023-11-30', 0, 'CTR001'),
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( 'MBR002', '0812345678', 'Jl. Kelinci', '2023-10-24', '2023-
11-30', 3, 'CTR002'),
('MBR003', '081234567890', 'Jl. Abah Ojak', '2023-10-25',
'2023-12-01', 2, 'CTR003'),
('MBR004', '08987654321', 'Jl. Kenangan', '2023-10-26', '2023-
12-02', 6, 'CTR005');

INSERT INTO Pegawai (NIK, Nama_Pegawai, Jenis_Kelamin, Email,
Umur, Nomor_Telp_Pegawai)
VALUES
('1234567890123456', 'Naufal Raf', 'L', 'naufal@gmail.com',
19, '62123456789'),
('2345678901234561', 'Surinala', 'P', 'surinala@gmail.com',
24, '621234567890'),
('3456789012345612', 'Ben John', 'L', 'benjohn@gmail.com', 22,
'6212345678');

INSERT INTO Transaksi (ID_Transaksi, Tanggal_Transaksi,
Metode_Pembayaran, Pegawai_NIK, Customer_ID_Customer)
VALUES
('TRX00000001', '2023-10-01', 'Kartu kredit',
'2345678901234561', 'CTR002'),
('TRX00000002', '2023-10-03', 'Transfer bank',
'3456789012345612', 'CTR004'),
('TRX00000003', '2023-10-05', 'Tunai', '3456789012345612',
'CTR001'),
('TRX00000004', '2023-10-15', 'Kartu debit',
'1234567890123456', 'CTR003'),
('TRX00000005', '2023-10-15', 'E-wallet', '1234567890123456',
'CTR004'),
('TRX00000006', '2023-10-21', 'Tunai', '2345678901234561',
'CTR001');

INSERT INTO Menu_Minuman (ID_Minuman, Nama_Minuman, Harga_Minuman)
VALUES
('MNM001', 'Espresso', 18000),
('MNM002', 'Cappuccino', 20000),
('MNM003', 'Latte', 21000),
('MNM004', 'Americano', 19000),
('MNM005', 'Mocha', 22000),
('MNM006', 'Macchiato', 23000),
('MNM007', 'Cold Brew', 21000),
('MNM008', 'Iced Coffee', 18000),
('MNM009', 'Affogato', 23000),
('MNM010', 'Coffee Frappe', 22000);

INSERT INTO Transaksi_Minuman (TM_Transaksi_ID,
TM_Menu_Minuman_ID, Jumlah_Cup)
VALUES
('TRX00000005', 'MNM006', 2),
('TRX00000001', 'MNM010', 1),
('TRX00000002', 'MNM005', 1),
('TRX00000005', 'MNM009', 1),
('TRX00000003', 'MNM001', 3),
('TRX00000006', 'MNM003', 2),
('TRX00000004', 'MNM004', 2),
('TRX00000004', 'MNM010', 1),
('TRX00000002', 'MNM003', 2),
('TRX00000001', 'MNM007', 1),
('TRX00000005', 'MNM001', 1),
('TRX00000003', 'MNM003', 1);

-- Soal Pendahuluan Nomor 5
INSERT INTO Transaksi (ID_Transaksi, Tanggal_Transaksi,
Metode_Pembayaran, Customer_ID_Customer, Pegawai_NIK)
VALUES
('TRX00000007', '2023-10-03', 'Transfer bank', 'CTR004',
'2345678901234561');

INSERT INTO Transaksi_Minuman (TM_Transaksi_ID,
TM_Menu_Minuman_ID, Jumlah_Cup)
VALUES
('TRX00000007', 'MNM005', 1);

-- Soal Pendahuluan Nomor 6
INSERT INTO Pegawai (NIK, Nama_Pegawai, Umur)
VALUES
('1111222233334444', 'Maimunah', 25);

-- Soal Pendahuluan Nomor 7
UPDATE Customer
SET ID_Customer = 'CTR004'
WHERE ID_Customer = 'CTR004';

-- Soal Pendahuluan Nomor 8
UPDATE Pegawai
SET Jenis_Kelamin = 'P', Nomor_Telp_Pegawai = '621234567', Email =
'maimunah@gmail.com'
WHERE Nama_Pegawai = 'Maimunah';

-- Soal Pendahuluan Nomor 9
UPDATE Membership
SET Total_Poin = 0
WHERE Tanggal_Kedaluwarsa_Kartu_Membership < '2023-12-01';

-- Soal Pendahuluan Nomor 10
DELETE FROM Membership;

-- Soal Pendahuluan Nomor 11
DELETE FROM Pegawai WHERE Nama_Pegawai = 'Maimunah';
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<div><div>SQL Facts</div><div><ul style="list-style-type: none"><li>SQL stands for Structured Query Language</li><li>SQL is pronounced “sequel”</li><li>SQL is declarative language</li><li>SQL is used to access &amp; manipulate data in databases</li><li>Top SQL DBs are MS SQL Server, Oracle, DB2, and MySQL</li></ul></div></div>	<div><div>SQL Commands Categories</div><div><div><i>Data Query Language (DQL)</i><ul style="list-style-type: none"><li>SELECT - Retrieve data from table(s)</li></ul></div><div><i>Data Manipulation Language (DML)</i><ul style="list-style-type: none"><li>INSERT - Insert data into db table</li><li>UPDATE - Update data in db table</li><li>DELETE - Delete data from table</li></ul></div><div><i>Data Definition Language (DDL)</i><ul style="list-style-type: none"><li>CREATE - Create db object (table, view, etc.)</li><li>ALTER - Modify db object (table, view, etc.)</li><li>DROP - Delete db object (table, view, etc.)</li></ul></div><div><i>Data Control Language (DCL)</i><ul style="list-style-type: none"><li>GRANT - Assign privilege</li><li>REVOKE - remove privilege</li></ul></div></div></div>
<div><div>Database Definitions</div><div><ul style="list-style-type: none"><li><b>RDBMS</b> (Relational Database Management System) – Software that stores and manipulates data arranged in relational database tables.</li><li><b>Table</b> – A set of data arranged in columns and rows. The columns represent characteristics of stored data and the rows represent actual data entries.</li></ul></div></div>	
<div><div>How to select data from a table</div><div>SELECT &lt;Column List&gt; FROM &lt;Table Name&gt; WHERE &lt;Search Condition&gt; <b>Example:</b> SELECT FirstName, LastName, OrderDate FROM Orders WHERE OrderDate &gt; '10/10/2010'</div></div>	<div><div>How to insert data in a table</div><div>INSERT INTO &lt;Table Name&gt; (&lt;Column List&gt;) VALUES (&lt;Values&gt;) <b>Example:</b> INSERT INTO Orders (FirstName, LastName, OrderDate) VALUES ( 'John', 'Smith', '10/10/2010' )</div></div>
<div><div>How to update data in a table</div><div>UPDATE &lt;Table Name&gt; SET &lt;Column1&gt; = &lt;Value1&gt;, &lt;Column2&gt; = &lt;Value2&gt;, ... WHERE &lt;Search Condition&gt; <b>Example:</b> UPDATE Orders SET FirstName = 'John', LastName = 'Who' WHERE LastName='Wo'</div></div>	<div><div>How to delete data from a table</div><div>DELETE FROM &lt;Table Name&gt; WHERE &lt;Search Condition&gt; <b>Example:</b> DELETE FROM Orders WHERE OrderDate &lt; '10/10/2010'</div></div>
<div><div>How to group data and use aggregates</div><div>SELECT &lt;Column List&gt;, &lt;Aggregate Function&gt;(&lt;Column Name&gt;) FROM &lt;Table Name&gt; WHERE &lt;Search Condition&gt; GROUP BY &lt;Column List&gt; <b>Example:</b> SELECT LastName, SUM(OrderValue) FROM Orders WHERE OrderDate &gt; '10/10/2010' GROUP BY LastName</div></div>	<div><div>How to order data</div><div>SELECT &lt;Column List&gt; FROM &lt;Table Name&gt; WHERE &lt;Search Condition&gt; ORDER BY &lt;Column List&gt; <b>Example:</b> SELECT FirstName, LastName, OrderDate FROM Orders WHERE OrderDate &gt; '10/10/2010' ORDER BY OrderDate</div></div>
<div><div>How to select data from more than one table</div><div>SELECT &lt;Column List&gt; FROM &lt;Table1&gt; JOIN &lt;Table2&gt; ON &lt;Table1&gt;.&lt;Column1&gt; = &lt;Table2&gt;.&lt;Column1&gt; <b>Example:</b> SELECT Orders.LastName, Countries.CountryName FROM Orders JOIN Countries ON Orders.CountryID = Countries.ID</div></div>	<div><div>Using UNION</div><div>SELECT &lt;Column List&gt; FROM &lt;Table1&gt; UNION SELECT &lt;Column List&gt; FROM &lt;Table2&gt; <b>Example:</b> SELECT FirstName, LastName FROM Orders2010 UNION SELECT FirstName, LastName FROM Orders2011</div></div>
<div><div>CREATE TABLE</div><div>CREATE TABLE &lt;Table Name&gt; ( Column1 DataType, Column2 DataType, Column3 DataType, .... )</div></div>	<div><div>CREATE TABLE</div><div>CREATE TABLE Orders ( FirstName CHAR(100), LastName CHAR(100), OrderDate DATE, OrderValue Currency )</div></div>