DBMS - LAB7

Name: **Anuvind MP**

Roll no.: **AM.EN.U4AIE22010**

CODE

```
-- CREATE TABLE Sectors(
-- sector_id int primary key,
-- sector_name varchar(50)
-- );


-- CREATE TABLE packages(
-- pack_id int primary key,
-- speed varchar(50),
-- start_date date,
-- monthly_payment decimal(10, 2),
-- sector_id int,
-- foreign key (sector_id) references sectors(sector_id)
-- );


-- CREATE TABLE Customers (
--     Customer_id INT PRIMARY KEY,
--     first_Name VARCHAR(50),
--     last_Name VARCHAR(50),
--     Birth_Date DATE,
--     Join_Date DATE,
--     City VARCHAR(50),
--     State VARCHAR(50),
--     Street VARCHAR(100),
--     main_phone_num VARCHAR(15),
```

```sql
--     secondary_phone_num VARCHAR(15),
--     fax VARCHAR(15),
--     monthly_discount DECIMAL(10, 2),
--     pack_id INT,
--     FOREIGN KEY (pack_id) REFERENCES packages(pack_id)
-- );


-- INSERT INTO Sectors (Sector_Id, Sector_Name)
-- VALUES
-- (1, 'Private'),
-- (2, 'Business'),
-- (3, 'Residential');
-- INSERT INTO Packages (pack_id, Speed, Start_Date, Monthly_Payment, Sector_Id)
-- VALUES
-- (22, '100 Mbps', '2022-01-01', 50.00, 1),
-- (27, '200 Mbps', '2021-06-15', 75.00, 2),
-- (23, '50 Mbps', '2023-02-01', 30.00, 3),
-- (24, '45 Mbps', '2022-04-11', 50.00, 2),
-- (28, '20 Mbps', '2021-12-18', 75.00, 1);
-- INSERT INTO Customers (Customer_Id, first_Name, last_Name, Birth_Date, Join_Date, City, State, Street, main_phone_num, secondary_phone_num, fax, monthly_discount, pack_id)
-- VALUES
-- (1, 'John', 'Doe', '1990-05-15', '2022-01-10', 'New York', 'NY', '123 Main St', '555-111-1234', '111-555-5678', '515-8165', 10.00, 22),
-- (2, 'Jane', 'Smith', '1985-09-23', '2021-08-15', 'Los Angeles', 'CA', '456 Elm St', '111-313-2345', '222-555-6789', '554-1876', 15.00, 27),
-- (3, 'Alice', 'Johnson', '1992-07-10', '2023-03-05', 'Chicago', 'IL', '789 Oak St', '777-555-3456', '333-555-7890', '575-5431', 5.00, 28),
```
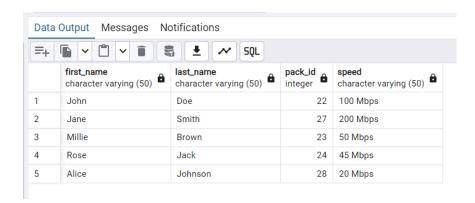
```
-- (4, 'Rose', 'Jack', '1995-10-23', '2016-06-08', 'Berlin', 'GE', '321 Sqr St',
'222-111-2345', '444-555-6789', '455-9076', 15.00, 24),

-- (5, 'Millie', 'Brown', '1982-12-10', '2023-04-21', 'Finland', 'FI', '987 Joint St',
'333-878-3456', '555-555-7890', '500-5232', 5.00, 23);




-- select c.first_name, c.last_name, c.pack_id, p.speed from Customers c
-- inner join packages p on c.pack_id = p.pack_id;


-- select c.first_name, c.last_name, c.pack_id, p.speed from Customers c
-- inner join packages p on c.pack_id = p.pack_id where
-- c.pack_id in (22, 27) order by c.last_name;


-- select p.pack_id, p.speed, p.monthly_payment, s.sector_name from packages p
-- inner join sectors s on p.sector_id = s.sector_id;



-- select c.first_name , c.last_name, c.pack_id, p.speed, p.monthly_payment,
s.sector_name from Customers c
-- inner join packages p on c.pack_id = p.pack_id inner join sectors s on p.sector_id =
s.sector_id;



-- select c.first_name, c.last_name, c.pack_id, p.speed, p.monthly_payment,
s.sector_name from Customers c
-- inner join packages p on c.pack_id = p.pack_id
-- inner join sectors s on p.sector_id = s.sector_id where s.sector_name = 'Business';



-- select c.first_name, c.last_name, c.join_date, c.pack_id, p.speed, s.sector_name
from Customers c
-- inner join packages p on c.pack_id = p.pack_id
-- inner join sectors s on p.sector_id = s.sector_id where s.sector_name = 'Private';
```

```sql
-- select c.first_name, c.last_name, p.speed, p.monthly_payment from Customers c
-- inner join packages p on c.pack_id = p.pack_id;


-- select c.first_name, c.last_name, p.speed, p.monthly_payment from Customers c
-- left outer join packages p on c.pack_id = p.pack_id;


-- select c.first_name, c.last_name, p.speed, p.pack_id from Customers c
-- right outer join packages p on c.pack_id = p.pack_id;


-- select c.first_name, c.last_name, p.speed, p.pack_id from Customers c
-- full join packages p on c.pack_id = p.pack_id;


-- INSERT INTO Packages (pack_id, Speed, Start_Date, Monthly_Payment, Sector_Id)
-- VALUES
-- (10, '111 Mbps', '2022-01-01', 50.00, 1),
-- (17, '20 Mbps', '2021-04-15', 75.00, 2);


-- INSERT INTO Customers (Customer_Id, first_Name, last_Name, Birth_Date, Join_Date, City, State, Street, main_phone_num, secondary_phone_num, fax, monthly_discount, pack_id)
-- VALUES
-- (101, 'Amado', 'Taylor', '1990-04-15', '2022-01-10', 'New York', 'NY', '113 Main St', '551-111-1234', '111-505-5678', '445-8165', 10.00, 10),
-- (103, 'Bright', 'Win', '1985-09-27', '2021-08-21', 'Los Angeles', 'CA', '455 Elm St', '101-313-2345', '222-155-6789', '524-1876', 15.00, 17);


-- select c1.last_name, c1.first_name, c1.pack_id from Customers c1
-- join customers c2 on c1.pack_id = c2.pack_id where c2.first_name = 'Amado'
-- and c2.last_name = 'Taylor';
```

-- SELECt c1.last_name, c1.first_name, c1.monthly_discount FROM Customers c1

-- JOIN Customers c2 ON c1.monthly_discount < c2.monthly_discount

-- WHERE c2.customer_id = 103;

-- INSERT INTO Packages (pack_id, Speed, Start_Date, Monthly_Payment, Sector_Id)

-- VALUES

-- (11, '111 Mbps', '2022-01-01', 50.00, 2);

-- SELECT p1.pack_id, p1.speed FROM packages p1

-- JOIN packages p2 ON p1.speed = p2.speed WHERE p2.pack_id = 10;

OUTPUTS

Data Output   Messages   Notifications

	first_name character varying (50)	last_name character varying (50)	pack_id integer	speed character varying (50)
1	John	Doe	22	100 Mbps
2	Jane	Smith	27	200 Mbps
3	Millie	Brown	23	50 Mbps
4	Rose	Jack	24	45 Mbps
5	Alice	Johnson	28	20 Mbps

Data Output | Messages | Notifications

	first_name character varying (50)	last_name character varying (50)	pack_id integer	speed character varying (50)
1	John	Doe	22	100 Mbps
2	Jane	Smith	27	200 Mbps

Data Output | Messages | Notifications

	pack_id integer	speed character varying (50)	monthly_payment numeric (10,2)	sector_name character varying (50)
1	22	100 Mbps	50.00	Private
2	27	200 Mbps	75.00	Business
3	23	50 Mbps	30.00	Residential
4	24	45 Mbps	50.00	Business
5	28	20 Mbps	75.00	Private

Data Output | Messages | Notifications

	first_name character varying (50)	last_name character varying (50)	pack_id integer	speed character varying (50)	monthly_payment numeric (10,2)	sector_name character varying (50)
1	John	Doe	22	100 Mbps	50.00	Private
2	Jane	Smith	27	200 Mbps	75.00	Business
3	Millie	Brown	23	50 Mbps	30.00	Residential
4	Rose	Jack	24	45 Mbps	50.00	Business
5	Alice	Johnson	28	20 Mbps	75.00	Private

Data Output | Messages | Notifications

	first_name character varying (50)	last_name character varying (50)	pack_id integer	speed character varying (50)	monthly_payment numeric (10,2)	sector_name character varying (50)
1	Jane	Smith	27	200 Mbps	75.00	Business
2	Rose	Jack	24	45 Mbps	50.00	Business

Data Output | Messages | Notifications

	first_name character varying (50)	last_name character varying (50)	join_date date	pack_id integer	speed character varying (50)	sector_name character varying (50)
1	John	Doe	2022-01-10	22	100 Mbps	Private
2	Alice	Johnson	2023-03-05	28	20 Mbps	Private

Data Output Messages Notifications

	first_name character varying (50)	last_name character varying (50)	speed character varying (50)	monthly_payment numeric (10,2)
1	John	Doe	100 Mbps	50.00
2	Jane	Smith	200 Mbps	75.00
3	Millie	Brown	50 Mbps	30.00
4	Rose	Jack	45 Mbps	50.00
5	Alice	Johnson	20 Mbps	75.00

Data Output Messages Notifications

	first_name character varying (50)	last_name character varying (50)	speed character varying (50)	monthly_payment numeric (10,2)
1	John	Doe	100 Mbps	50.00
2	Jane	Smith	200 Mbps	75.00
3	Millie	Brown	50 Mbps	30.00
4	Rose	Jack	45 Mbps	50.00
5	Alice	Johnson	20 Mbps	75.00

Data Output Messages Notifications

	first_name character varying (50)	last_name character varying (50)	speed character varying (50)	pack_id integer
1	John	Doe	100 Mbps	22
2	Jane	Smith	200 Mbps	27
3	Millie	Brown	50 Mbps	23
4	Rose	Jack	45 Mbps	24
5	Alice	Johnson	20 Mbps	28

Data Output   Messages   Notifications

	first_name character varying (50)	last_name character varying (50)	speed character varying (50)	pack_id integer
1	John	Doe	100 Mbps	22
2	Jane	Smith	200 Mbps	27
3	Millie	Brown	50 Mbps	23
4	Rose	Jack	45 Mbps	24
5	Alice	Johnson	20 Mbps	28

Data Output   Messages   Notifications

	last_name character varying (50)	first_name character varying (50)	pack_id integer
1	Taylor	Amado	10

Data Output   Messages   Notifications

	last_name character varying (50)	first_name character varying (50)	monthly_discount numeric (10,2)
1	Doe	John	10.00
2	Johnson	Alice	5.00
3	Brown	Millie	5.00
4	Taylor	Amado	10.00

Data Output   Messages   Notifications

	pack_id [PK] integer	speed character varying (50)
1	10	111 Mbps
2	11	111 Mbps