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<div align="center">Coding Assignment 3: Database Operations</div>

1)

```
postgres=# CREATE TABLE Person (
postgres(#     id INT,
postgres(#     name VARCHAR(50),
postgres(#     age INT
[postgres(# );
CREATE TABLE
postgres=# INSERT INTO Person (id, name, age) VALUES (1, 'John', 25);
INSERT 0 1
postgres=# INSERT INTO Person (id, name, age) VALUES (2, 'Jane', 30);
INSERT 0 1
postgres=# INSERT INTO Person (id, name, age) VALUES (3, 'Michael', 28);
INSERT 0 1
postgres=# INSERT INTO Person (id, name, age) VALUES (4, 'Emily', 27);
INSERT 0 1
postgres=# INSERT INTO Person (id, name, age) VALUES (5, 'William', 26);
INSERT 0 1
postgres=# INSERT INTO Person (id, name, age) VALUES (6, 'Emma', 24);
INSERT 0 1
postgres=# INSERT INTO Person (id, name, age) VALUES (7, 'Oliver', 29);
INSERT 0 1
postgres=# INSERT INTO Person (id, name, age) VALUES (8, 'Sophia', 31);
INSERT 0 1
postgres=# INSERT INTO Person (id, name, age) VALUES (9, 'Daniel', 26);
INSERT 0 1
[postgres=# INSERT INTO Person (id, name, age) VALUES (10, 'Isabella', 27);
INSERT 0 1
postgres=#
```

```
[postgres=# SELECT * from Person;
 id |   name   | age
----+----------+-----
  1 | John     |  25
  2 | Jane     |  30
  3 | Michael  |  28
  4 | Emily    |  27
  5 | William  |  26
  6 | Emma     |  24
  7 | Oliver   |  29
  8 | Sophia   |  31
  9 | Daniel   |  26
 10 | Isabella |  27
(10 rows)
```

2)

```
postgres=# DELETE FROM Person WHERE age > 30;
DELETE 1
```

```
[postgres=# SELECT * from Person;
 id |   name   | age
----+----------+-----
  1 | John     |  25
  2 | Jane     |  30
  3 | Michael  |  28
  4 | Emily    |  27
  5 | William  |  26
  6 | Emma     |  24
  7 | Oliver   |  29
  9 | Daniel   |  26
 10 | Isabella |  27
(9 rows)
```

3)

```
[postgres=# UPDATE Person SET age = 32 WHERE name = 'Jane';
 UPDATE 1
```

```
[postgres=# SELECT * from Person;
 id |   name   | age
----+----------+-----
  1 | John     |  25
  3 | Michael  |  28
  4 | Emily    |  27
  5 | William  |  26
  6 | Emma     |  24
  7 | Oliver   |  29
  9 | Daniel   |  26
 10 | Isabella |  27
  2 | Jane     |  32
(9 rows)
```

4)

```
[postgres=# SELECT * from Person WHERE age < 30;
 id |   name   | age
----+----------+-----
  1 | John     |  25
  3 | Michael  |  28
  4 | Emily    |  27
  5 | William  |  26
  6 | Emma     |  24
  7 | Oliver   |  29
  9 | Daniel   |  26
 10 | Isabella |  27
(8 rows)
```

5)

```
[postgres=# SELECT * from Person WHERE name LIKE 'J%' AND age < 30;
 id | name | age
----+------+-----
  1 | John |  25
(1 row)
```

6)

```
postgres=# ALTER TABLE Person ALTER COLUMN age TYPE VARCHAR(10);
ALTER TABLE
```

7)

```
[postgres=# SELECT * FROM Person ORDER BY age ASC;
 id |   name   | age
----+----------+-----
  6 | Emma     | 24
  1 | John     | 25
  5 | William  | 26
  9 | Daniel   | 26
 10 | Isabella | 27
  4 | Emily    | 27
  3 | Michael  | 28
  7 | Oliver   | 29
  2 | Jane     | 32
(9 rows)
```

8)

```
[postgres=# SELECT age, COUNT(*) as count FROM Person GROUP BY age;
 age | count
-----+--------
 32  |     1
 29  |     1
 28  |     1
 25  |     1
 27  |     2
 24  |     1
 26  |     2
(7 rows)
```