

Q.5. Create type rectangle with attributes length, breadth and member function rect_area that returns area of the rectangle. Create table shape of rectangle type & insert record into it. Display the length, breadth and area of rectangles.

SQL Query:

```
-- Create a user-defined type (UDT) for a rectangle
CREATE TYPE rectangle AS object(
    length int,
    breadth int
);
```

```
-- Create a table "shape" using the rectangle UDT
CREATE TABLE shape (
    id int PRIMARY KEY,
    rect rectangle
);
```

```
-- Insert records into the "shape" table
INSERT INTO shape VALUES (1,rectangle(5, 4));
INSERT INTO shape VALUES (2,rectangle(6, 3));
INSERT INTO shape VALUES (3,rectangle(7, 2));
```

```
-- Display the length, breadth, and area of rectangles
SELECT s.rect.length AS length, s.rect.breadth AS breadth, (s.rect.length * s.rect.breadth) AS
area FROM shape s;
```

| LENGTH | BREADTH | AREA |
|--------|---------|------|
| 5 | 4 | 20 |
| 6 | 3 | 18 |
| 7 | 2 | 14 |