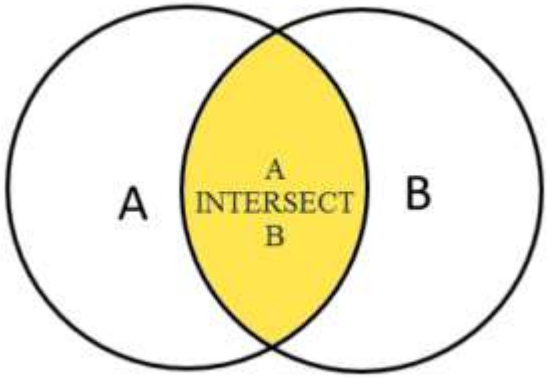
Intersect – combines the result sets of two or more queries and returns a single result set that has the rows appear in both result sets.

PostgreSQL `Intersect` clause statement syntax

Like the UNION and EXCEPT operators, the PostgreSQL `INTERSECT` operator combines the result sets of two or more SELECT statements into a single result set.

The `INTERSECT` operator returns any rows that are available in both result set or returned by both queries.

The following illustration shows the final result set produced by the `INTERSECT` operator. The final result set is represented by the yellow area where the circle A intersects with the circle B.



The following illustrates the syntax of the `INTERSECT` operator:

```
SELECT column_list FROM A INTERSECT SELECT column_list FROM B;
```

To use the `INTERSECT` operator, the columns that appear in the `SELECT` statements must follow the rules below:

1. The number of columns and their order in the `SELECT` clauses must the be the same.
2. The data types of the columns must be compatible.

Intersect – combines the result sets of two or more queries and returns a single result set that has the rows appear in both result sets.

PostgreSQL INTERSECT operator example

The following `CREATE TABLE` statement creates three tables: `employees` , `keys`, and `hipos`.

```
CREATE TABLE employees (
employee_id serial PRIMARY KEY,
employee_name VARCHAR (255) NOT NULL
);

CREATE TABLE keys (
employee_id INT PRIMARY KEY,
effective_date DATE NOT NULL,
FOREIGN KEY (employee_id) REFERENCES employees (employee_id)
);

CREATE TABLE hipos (
employee_id INT PRIMARY KEY,
effective_date DATE NOT NULL,
FOREIGN KEY (employee_id) REFERENCES employees (employee_id)
);
```

The `employees` table stores the employee master data. The `keys` table stores the key employees and the `hipos` table stores the employees who are high potential and high impact.

Intersect – combines the result sets of two or more queries and returns a single result set that has the rows appear in both result sets.

The following INSERT statements insert some sample data into the `employees`, `keys`, and `hipos` tables:

```
INSERT INTO employees (employee_name)
VALUES
('Joyce Edwards'),
('Diane Collins'),
('Alice Stewart'),

INSERT INTO keys
VALUES
(1, '2000-02-01'),
(2, '2001-06-01'),
(5, '2002-01-01'),
(7, '2005-06-01');

INSERT INTO hipos
VALUES
(9, '2000-01-01'),
(2, '2002-06-01'),
(5, '2006-06-01'),
(10, '2005-06-01');
```

The following statement returns the key employees from the `keys` table.

```
SELECT employee_id FROM keys;
```

```
 employee_id
-------------
           1
           2
           5
           7
(4 rows)
```

The following statement returns a list of `employee_id` from the `hipos` table.

```
SELECT employee_id FROM hipos;
```

```
 employee_id
-------------
           9
           2
           5
          10
(4 rows)
```

Intersect – combines the result sets of two or more queries and returns a single result set that has the rows appear in both result sets.

To get the employees who are both keys, and high potential and high impact.

```
SELECT employee_id FROM keys INTERSECT SELECT employee_id FROM hipos;
```

```
 employee_id
-------------
           5
           2
(2 rows)
```