

Interactive - 35 - views

The database can create a pre-defined select called a view. A view is a query that you set up that looks like a table when selected from but can be a join or other set of operations. It is kind of like a query-macro.

For example we can create a view that let's us list the unused indexes.

This is the file hw35_1.sql.

```
CREATE OR REPLACE VIEW unused_index as
SELECT
    idstat.relname AS TABLE_NAME,
    indexrelname AS INDEX_NAME,
    idstat.idx_scan AS index_scans_count,
    pg_size_pretty(pg_relation_size(indexrelid)) AS index_size,
    tabstat.idx_scan AS table_reads_index_count,
    tabstat.seq_scan AS table_reads_seq_count,
    tabstat.seq_scan + tabstat.idx_scan AS table_reads_count,
    n_tup_upd + n_tup_ins + n_tup_del AS table_writes_count,
    pg_size_pretty(pg_relation_size(idstat.relid)) AS table_size
FROM pg_stat_user_indexes AS idstat
    JOIN pg_indexes ON indexrelname = indexname
        AND idstat.schemaname = pg_indexes.schemaname
    JOIN pg_stat_user_tables AS tabstat ON idstat.relid = tabstat.relid
WHERE indexdef !~* 'unique'
ORDER BY
    idstat.idx_scan DESC,
    pg_relation_size(indexrelid) DESC
;
```

Then when we want the list of unused indexes we just select from the view.

```
SELECT * from unused_index;
```