

## <PostgreSQL - cs421> Script-7

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/*
 * A stored procedure that ensures that no two employees have the same company email.
 *
 * It does this by defining a cursor to the emails of the employees, and iterating
 * through them. If two company emails are identical, the second duplicate is changed by
 * appending the digit <1> to the end of the email address.
 *
 * For example, if two emails <jeff1@amazon.com> are in the database under two employees'
emails,
 * then the second will be changed to <jeff11@amazon.com.>
 */
DO $$DECLARE
-- Keep track of previous email you've seen
prev_email VARCHAR(100) := '';
-- A record to insert rows into
rec_emails RECORD;
rec_first_email RECORD;
-- Cursor to fetch emails, in order
cursor_emails CURSOR
FOR
    SELECT p.email, p.pid
    FROM person p
    INNER JOIN employee e
        ON p.pid = e.pid
    ORDER BY 1;
cursor_first_email CURSOR
FOR
    SELECT p.email, p.pid
    FROM person p
    INNER JOIN employee e
        ON p.pid = e.pid
    ORDER BY 1
    LIMIT 1;
-- A text variable to store the update statements
update_statement TEXT := '';
BEGIN
-- Get the first email
OPEN cursor_first_email;
FETCH cursor_first_email INTO rec_first_email;
prev_email = rec_first_email.email;
-- Open the cursor
OPEN cursor_emails;
LOOP
-- fetch row into the film
FETCH cursor_emails INTO rec_emails;
-- exit when no more row to fetch
EXIT WHEN NOT FOUND;
-- build the output
IF rec_emails.email = prev_email THEN
-- Build the update statement
update_statement := 'update person set email = ' ||
    quote_literal(split_part(rec_emails.email, '@', 1) || '1' || '@' ||
split_part(rec_emails.email, '@', 2)) ||
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        ' where pid = ' || rec_emails.pid;
    -- Executer statement
    raise notice '%', update_statement;
    EXECUTE update_statement;
    -- Update the previous email you've seen
    prev_email = split_part(rec_emails.email, '@', 1) || '1' || '@' ||
split_part(rec_emails.email, '@', 2);
    ELSE
        prev_email = rec_emails.email;
    END IF;
END LOOP;
-- Close the cursor
CLOSE cursor_emails;
END$$;
```