

## Bases de Dados

### Lab 09: Indices & Optimisation

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## Index Creation

1. Use the **index\_data.sql** script to populate the **account** table with the **\i index\_data.sql** command
2. Run the command "**\d account**" to obtain information about the indexes of the **account** table. Notice the existing indexes. By default, the system creates an index for a table's primary key. What kind of index is it?
3. Run the command "**\timing**"
4. Run the following query:

```
SELECT * FROM account WHERE account_number='A-012345';
```

Note the time it takes the system to execute this command

5. Delete the primary key from the table with the command:

```
ALTER TABLE account DROP CONSTRAINT account_pkey;
```

6. Repeat step 4 and take note of the time. How do you explain this result?
7. Create the primary key back on the table with the command:

```
ALTER TABLE account ADD PRIMARY KEY(account_number);
```

Note the time it takes the system to execute this command. How do you explain this result?

8. Repeat step 4 and note the time. How do you explain the possible time difference compared to previous result of point 6?