

# Advance databases Project 1

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## Performance test 1

The test consist of 10 epochs per data type, where Btree and LinkedList are the two possibles data type for the index.

On each test, the insert test will insert the whole csv given, then the search test will look for a already inserted record.

This process will be repeated 10 times.

**In general, Link was at least 3 times faster when inserting; Nevertheless, when searching is about, bTree out-performs List by 4 - 5 times.**

### 1.1 Insert

| Run | link     | bTree    |
|-----|----------|----------|
| 1   | 34.916µs | 92.25µs  |
| 2   | 24.208µs | 89.084µs |
| 3   | 26.875µs | 86.583µs |
| 4   | 32.125µs | 87µs     |
| 5   | 26.791µs | 82.083µs |
| 6   | 28µs     | 86.708µs |
| 7   | 23.333µs | 84.208µs |
| 8   | 32.833µs | 84.916µs |
| 9   | 23.041µs | 88.583µs |
| 10  | 22.75µs  | 87.625µs |

### 1.2 Search

| Run | link  | bTree |
|-----|-------|-------|
| 1   | 375ns | 250ns |
| 2   | 416ns | 84ns  |
| 3   | 334ns | 42ns  |
| 4   | 458ns | 42ns  |
| 5   | 208ns | 42ns  |
| 6   | 208ns | 83ns  |
| 7   | 208ns | 84ns  |
| 8   | 208ns | 42ns  |
| 9   | 209ns | 41ns  |
| 10  | 208ns | 83ns  |