

Algorithmics	Student information	Date	Number of session
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## A. Implementation

**Design one or more heuristics for Branch and Bound algorithm to solve this problem in the most efficient way possible.**

We should only go through those nodes where you can get into the list the biggest number of songs, if we find a node where it seems that we will have less songs than if we go through others, we cut that path.

## B. Measurements: comparison with Backtracking

**4. Discuss about the efficiency of both techniques (Backtracking and Branch 'n' Bound) based on the results obtained.**

In backtracking the efficiency depends on some things. It is a good algorithm if it reduces the number of nodes where we are going to search, but these usually spends so much time so we should look for a balance.

Branch and bound is similar to backtracking but with this algorithm we stop looking through those paths that do not fulfil the heuristic. This is good because we spend less time, but depending if our heuristic is good or not we could not find the best solution.