Algorithmics	Student information	Date	Number of session
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Activity 1. [PARTA]

Explain what the proposed branching heuristic consists of.

A Branching Heuristic is a strategy used in search algorithms (like Branch and Bound) to decide the order in which to explore different paths or nodes. It helps prioritize the most promising paths to explore first, improving the efficiency of the search. The goal is to reduce the search space and find the optimal solution faster by choosing paths that are more likely to lead to a good result.

Activity 2. [PARTD]

Branch and bound:

n	t NullPath
10	2
11	4
12	11
13	33
14	114
15	277
16	880
17	2036
18	4329

Backtracking:

n	t NullPath
10	13
11	117
12	1237

As the execution time with Branch and Bound is significantly lower than with Backtracking, it indicates that Branch and Bound has achieved the desired objective of reducing execution time. The Branch and Bound algorithm is more efficient because it avoids unnecessary exploration of paths, leading to faster solutions, especially in larger or more complex problem spaces.