**Greedy Search**

**Algorithmic Steps of Greedy Best-First Search Algorithm**

Here is a simplified step-by-step breakdown of the Greedy Best-First Search algorithm:

1. Initialize: Start from an initial node (often the root or starting point). Add this node to a priority queue.
2. Expand Nodes: Evaluate all neighboring nodes of the current node. Assign each node a value based on a heuristic function, typically representing the estimated distance to the goal.
3. Select Best Node: From the priority queue, select the node with the lowest heuristic value (the node that appears closest to the goal).
4. Goal Check: If the selected node is the goal, terminate the search.
5. Continue: If not, repeat steps 2 to 4 for the next node until the goal is reached or the queue is empty.

A\* uses a function:

f(n)=g(n)+h(n)

Where:

* **f(n)**= Estimated total cost from start to goal through node n.
* **g(n)** = Cost from the **start node to n**(actual cost).
* **h(n)** = Estimated cost from **nnn to the goal** (heuristic).