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a_star.ipynb - Colab
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heuristic = {
    'A': 4,
    'B': 3,
    'C': 3,
    'D': 1,
    'S': 6,
    'G': 0
}

graph = {
    'S': ('A': 3, 'D': 2),
    'A': ('B': 1, 'D': 5),
    'B': ('C': 2, 'D': 3),
    'C': ('D': 3, 'G': 4),
    'D': ('G': 1),
}

start_node = 'S'
goal_node = 'G'
a_star_tree_search(graph, heuristic, start_node, goal_node)
a_star_graph_search(graph, heuristic, start_node, goal_node)

goal node found
route optimal ['S', 'B', 'D', 'G']
goal node found
route optimal ['S', 'B', 'D', 'G']
True

Connecting to Python 3 Google Compute Engine backend
```

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# Graph dengan biaya antar simpul (g(x))
graph = {
    'S': ('A': 3, 'E': 2),
    'A': ('B': 3, 'C': 4),
    'B': ('D': 5),
    'C': ('D': 3),
    'D': ('G': 3),
    'E': ('D': 8),
}

start_node = 'S'
goal_node = 'G'

a_star_graph_search(graph, start_node, goal_node, heuristic)

Simpul tujuan ditemukan!
Jalur yang ditemukan: S -> A -> C -> G
Total biaya jalur: 10
True

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```