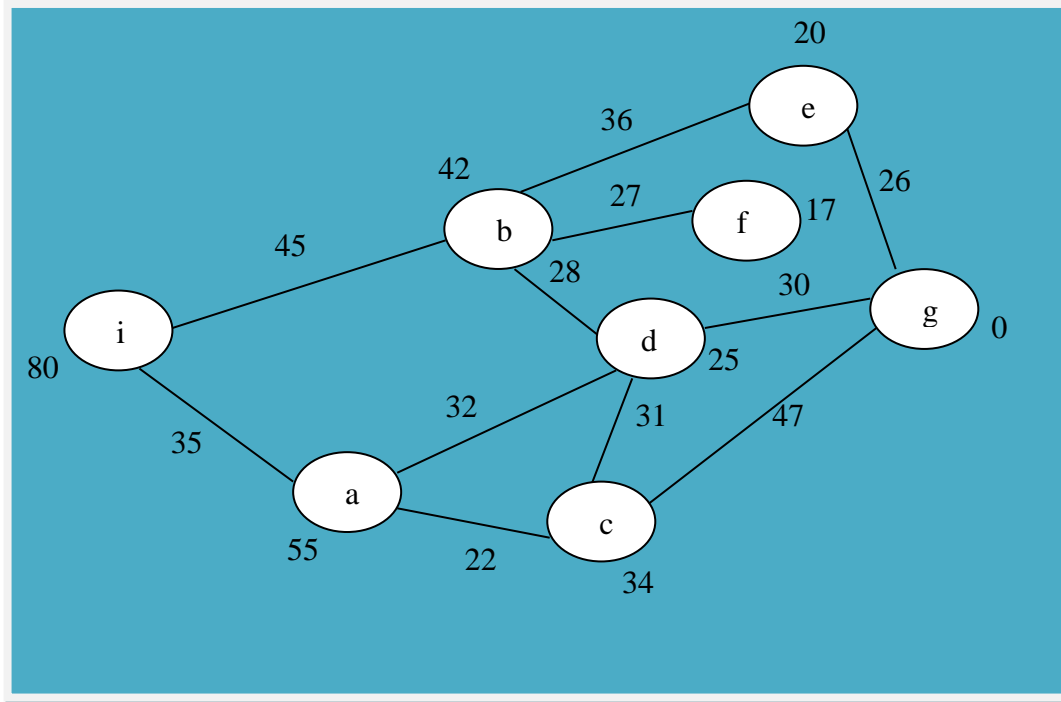


### 3.2. Greedy Best-First and A\* Search.

An example (problem instance):



i – Initial state/node

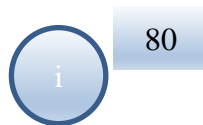
g – Goal state/node

#### Execution of Greedy Best-First Search

Step 1.

PQ: [node(i, 80)]

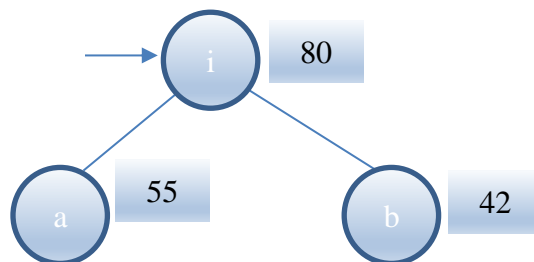
PP: [ ]

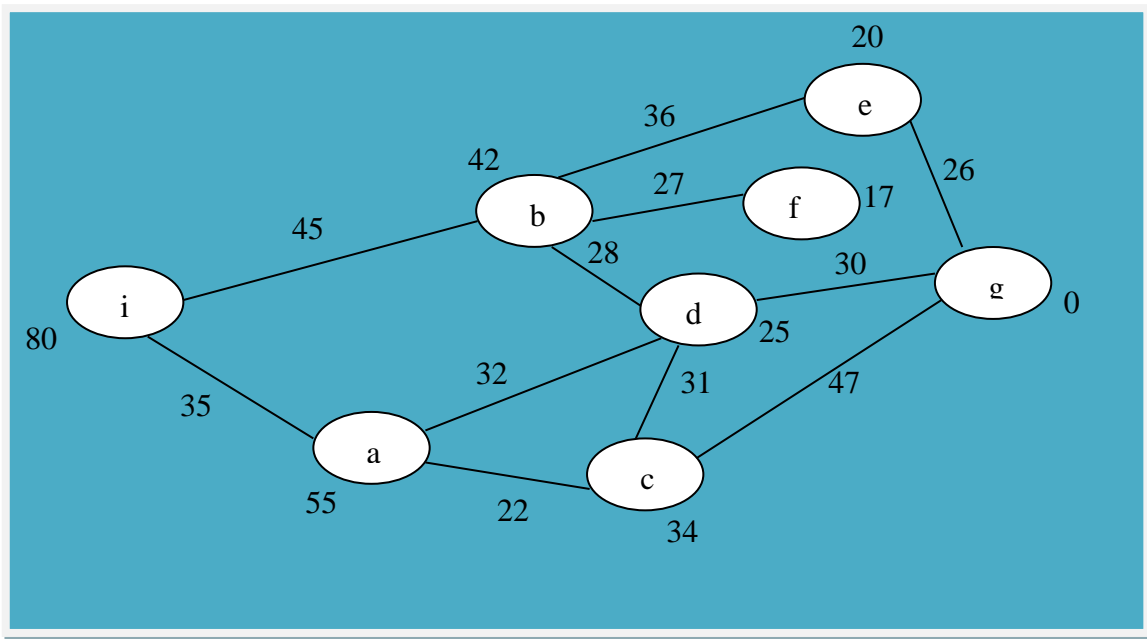


Step 2.

PQ: [node(b, 42), node(a, 55)]

PP: [i]

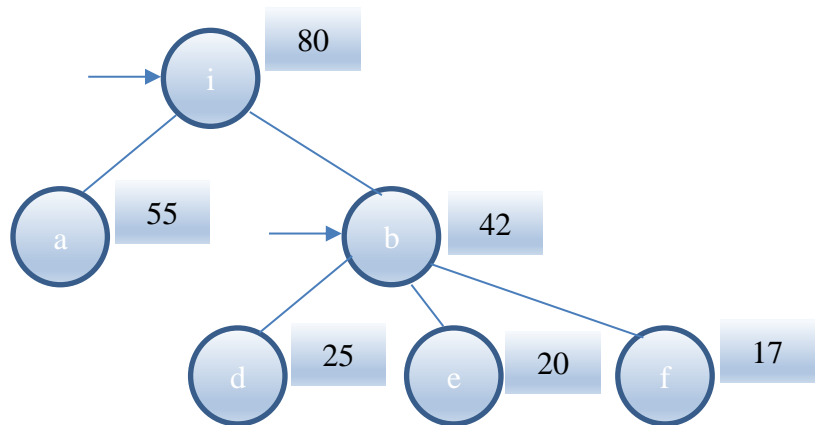




Step 3.

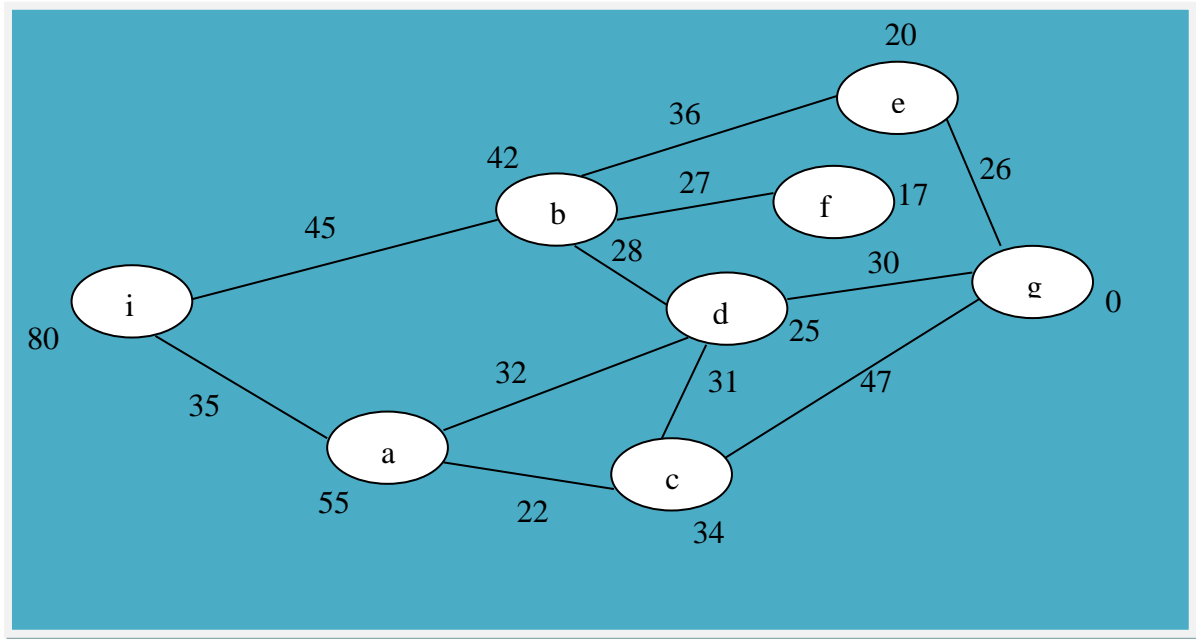
PQ: [node(f, 17), node(e, 20), node(d, 25), node(a, 55)]

PP: [i, b]



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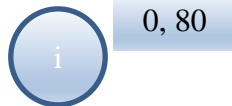
## Execution of A\* Search



Step 1.

PQ: [node(i, 0, nil, 80)]

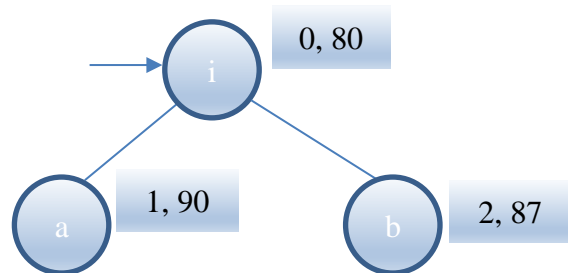
PP: [ ]

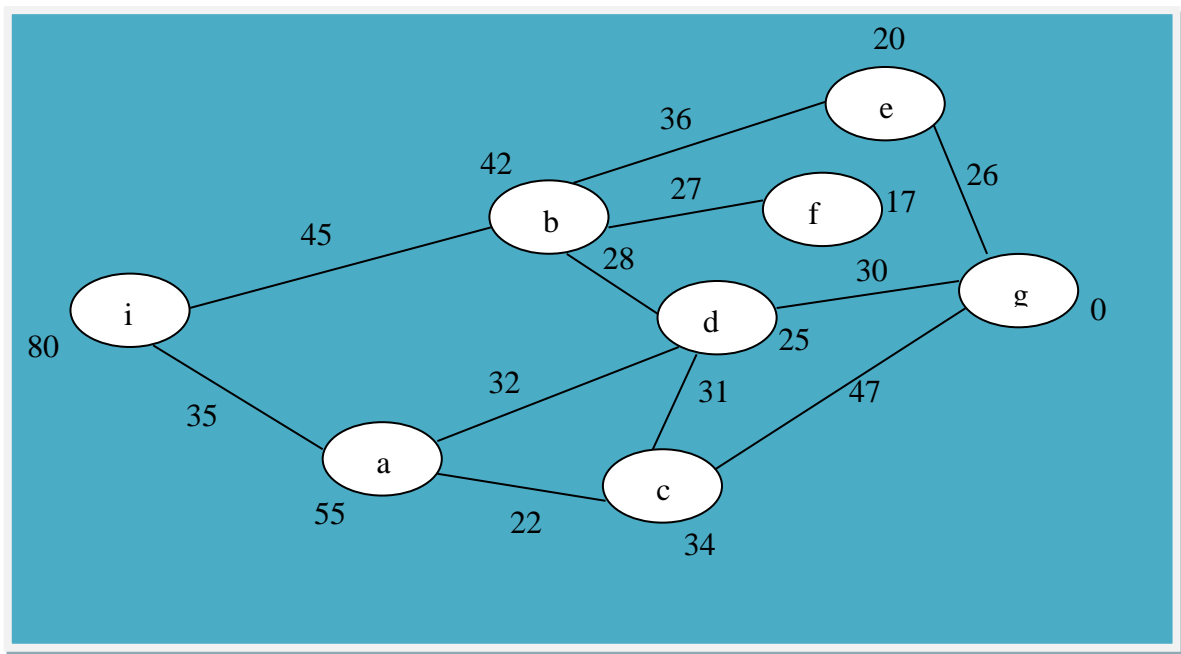


Step 2.

PQ: [node(b, 2, 0, 87), node(a, 1, 0, 90)]

PP: [i]





Step 3.

PQ: [node(f, 6, 2, 89), node(a, 1, 0, 90), node(d, 4, 2, 98), node(e, 5, 2, 101), node(i, 3, 2, 170)]

PP: [i, b]

