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**Algorithm 1** :  $B\_F2F\_Abstraction(init, goal, H) \rightarrow optimalSolutionCost$

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```
if already solved then
    return(0)
end if
nodes  $\leftarrow$  (init, Fw, 0, open), (goal, Bw, 0, open)
gLim(Bw)  $\leftarrow$  gLim(Fw)  $\leftarrow$  0
incrementedDir  $\leftarrow$  Bw
for gSum from 1 up by 1 until unsolvable do
    incrementedDir  $==$  opposite(incrementedDir) + 1
    if expandLevel(nodes, gLim(), gSum, H) then
        return(gSum)
    end if
end for
```

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