

Initial State : I

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Search Set : [I]

Closed Set : []

Current Path in microscope:I

Current State in microscope:I

Children States : [IA]

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Search Set : [IA]

Closed Set : [I]

Current Path in microscope:IA

Current State in microscope:A

Children States : [IAL , IAI , IAB]

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Search Set : [IAL , IAI , IAB]

Closed Set : [I , A]

Current Path in microscope:IAL

Current State in microscope:L

Children States : [IALK , IALA]

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Search Set : [IAI , IAB , IALK , IALA]

Closed Set : [I , A , L]

Current Path in microscope:IAI

Current State in microscope:I

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Search Set : [IAB , IALK , IALA]

Closed Set : [I , A , L]

Current Path in microscope:IAB

Current State in microscope:B

Children States : [IABA , IABC]

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Search Set : [IALK , IALA , IABA , IABC]

Closed Set : [I , A , L , B]

Current Path in microscope:IALK

Current State in microscope:K

Children States : [IALKJ , IALKL]

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Search Set : [IALA , IABA , IABC , IALKJ , IALKL]

Closed Set : [I , A , L , B , K]

Current Path in microscope:IALA

Current State in microscope:A

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Search Set : [IABA , IABC , IALKJ , IALKL]

Closed Set : [I , A , L , B , K]

Current Path in microscope:IABA

Current State in microscope:A

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Search Set : [IABC , IALKJ , IALKL]

Closed Set : [I , A , L , B , K]

Current Path in microscope:IABC

Current State in microscope:C

Children States : [IABCD , IABCB , IABCG]

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Search Set : [IALKJ , IALKL , IABCD , IABCB , IABCG]

Closed Set : [I , A , L , B , K , C]

Current Path in microscope:IALKJ

Current State in microscope:J

Children States : [IALKJK , IALKJH]

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Search Set : [IALKL , IABCD , IABCB , IABCG , IALKJK , IALKJH]

Closed Set : [I , A , L , B , K , C , J]

Current Path in microscope:IALKL

Current State in microscope:L

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Search Set : [IABCD , IABCB , IABCG , IALKJK , IALKJH]

Closed Set : [I , A , L , B , K , C , J]

Current Path in microscope:IABCD

Current State in microscope:D

Children States : [IABCDE , IABCDC]

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Search Set : [IABCB , IABCG , IALKJK , IALKJH , IABCDE , IABCDC]

Closed Set : [I , A , L , B , K , C , J , D]

Current Path in microscope:IABCB

Current State in microscope:B

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Search Set : [IABCG , IALKJK , IALKJH , IABCDE , IABCDC]

Closed Set : [I , A , L , B , K , C , J , D]

Current Path in microscope:IABCG

Current State in microscope:G

! Solution Found ! : IABCG

Path Length : 4 --> New limit!!(best solution/path we have so far)

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Search Set : [IALKJK , IALKJH , IABCDE , IABCDC]

Closed Set : [I , A , L , B , K , C , J , D , G]

Current Path in microscope:IALKJK

Current State in microscope:K

Path length is too long in comparison to the current limit(path length of the best solution we have so far).As a result we have to <<cut>>(not examine) this certain path since it will not provide a better solution .

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Search Set : [IALKJH , IABCDE , IABCDC]

Closed Set : [I , A , L , B , K , C , J , D , G]

Current Path in microscope:IALKJH

Current State in microscope:H

Path length is too long in comparison to the current limit(path length of the best solution we have so far).As a result we have to <<cut>>(not examine) this certain path since it will not provide a better solution .

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Search Set : [IABCDE , IABCDC]

Closed Set : [I , A , L , B , K , C , J , D , G , H]

Current Path in microscope:IABCDE

Current State in microscope:E

Path length is too long in comparison to the current limit(path length of the best solution we have so far).As a result we have to <<cut>>(not examine) this certain path since it will not provide a better solution .

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Search Set : [IABCDC]

Closed Set : [I , A , L , B , K , C , J , D , G , H , E]

Current Path in microscope:IABCDC

Current State in microscope:C

Path length is too long in comparison to the current limit(path length of the best solution we have so far).As a result we have to <<cut>>(not examine) this certain path since it will not provide a better solution .

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!Final Solution! : IABCG

Path length:4

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