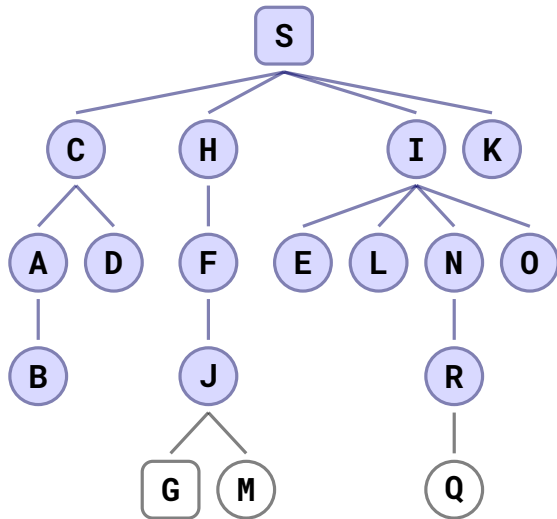


Search Tree



Solution

OPEN and CLOSED carry pairs: (NODE,PARENT)

OPEN (S,null):[]

CLOSED []

1.
NODE S
close (S,null)
moveGen C:H:I:K:[]
newNodes C:H:I:K:[]
newPairs (C,S):(H,S):(I,S):(K,S):[]

OPEN (C,S):(H,S):(I,S):(K,S):[]

CLOSED (S,null):[]

2.
NODE C
close (C,S)
moveGen A:D:H:S:[]
newNodes A:D:[]
newPairs (A,C):(D,C):[]

OPEN (H,S):(I,S):(K,S):(A,C):(D,C):[]

CLOSED (C,S):(S,null):[]

3.
NODE H
close (H,S)
moveGen C:D:F:K:S:[]
newNodes F:[]
newPairs (F,H):[]

OPEN (I,S):(K,S):(A,C):(D,C):(F,H):[]

CLOSED (H,S):(C,S):(S,null):[]

4.
NODE I
close (I,S)
moveGen E:L:N:O:S:[]
newNodes E:L:N:O:[]
newPairs (E,I):(L,I):(N,I):(O,I):[]

OPEN (K,S):(A,C):(D,C):(F,H):(E,I):

(L,I):(N,I):(O,I):[]

CLOSED (I,S):(H,S):(C,S):(S,null):[]

5.
NODE K
close (K,S)
moveGen H:N:S:[]
newNodes []
newPairs []

OPEN (A,C):(D,C):(F,H):(E,I):(L,I):

(N,I):(O,I):[]

CLOSED (K,S):(I,S):(H,S):(C,S):(S,null):[]

6.
NODE A
close (A,C)
moveGen B:C:D:[]
newNodes B:[]
newPairs (B,A):[]

OPEN (D,C):(F,H):(E,I):(L,I):(N,I):

(O,I):(B,A):[]

CLOSED (A,C):(K,S):(I,S):(H,S):(C,S):

(S,null):[]

7.
NODE D
close (D,C)
moveGen A:C:F:H:[]
newNodes []
newPairs []

OPEN (F,H):(E,I):(L,I):(N,I):(O,I):

(B,A):[]

CLOSED (D,C):(A,C):(K,S):(I,S):(H,S):

(C,S):(S,null):[]

8.
NODE F
close (F,H)
moveGen B:D:H:J:[]
newNodes J:[]
newPairs (J,F):[]

OPEN (E,I):(L,I):(N,I):(O,I):(B,A):

(J,F):[]

CLOSED (F,H):(D,C):(A,C):(K,S):(I,S):

(H,S):(C,S):(S,null):[]

9.
NODE E
close (E,I)
moveGen I:L:[]
newNodes []
newPairs []

OPEN (L,I):(N,I):(O,I):(B,A):(J,F):[]

CLOSED (E,I):(F,H):(D,C):(A,C):(K,S):

(I,S):(H,S):(C,S):(S,null):[]

10.
NODE L
close (L,I)
moveGen E:I:O:[]
newNodes []
newPairs []

OPEN (N,I):(O,I):(B,A):(J,F):[]

CLOSED (L,I):(E,I):(F,H):(D,C):(A,C):

(K,S):(I,S):(H,S):(C,S):(S,null):[]

11.
NODE N
close (N,I)
moveGen I:K:O:R:[]
newNodes R:[]
newPairs (R,N):[]

OPEN (O,I):(B,A):(J,F):(R,N):[]

CLOSED (N,I):(L,I):(E,I):(F,H):(D,C):

(A,C):(K,S):(I,S):(H,S):(C,S):

(S,null):[]

12.
NODE O
close (O,I)
moveGen I:L:N:[]
newNodes []
newPairs []

OPEN (B,A):(J,F):(R,N):[]

CLOSED (O,I):(N,I):(L,I):(E,I):(F,H):

(D,C):(A,C):(K,S):(I,S):(H,S):

(C,S):(S,null):[]

13.
NODE B
close (B,A)
moveGen A:F:[]
newNodes []
newPairs []

OPEN (J,F):(R,N):[]

CLOSED (B,A):(O,I):(N,I):(L,I):(E,I):

(F,H):(D,C):(A,C):(K,S):(I,S):

(H,S):(C,S):(S,null):[]

14.
NODE J
close (J,F)
moveGen F:G:M:[]
newNodes G:M:[]
newPairs (G,J):(M,J):[]

OPEN (R,N):(G,J):(M,J):[]

CLOSED (J,F):(B,A):(O,I):(N,I):(L,I):

(E,I):(F,H):(D,C):(A,C):(K,S):

(I,S):(H,S):(C,S):(S,null):[]

15.
NODE R
close (R,N)
moveGen N:Q:[]
newNodes Q:[]
newPairs (Q,R):[]

OPEN (G,J):(M,J):(Q,R):[]

CLOSED (R,N):(J,F):(B,A):(O,I):(N,I):

(L,I):(E,I):(F,H):(D,C):(A,C):

(K,S):(I,S):(H,S):(C,S):(S,null):[]

16.
NODE G
GOAL G

OPEN (G,J):(M,J):(Q,R):[]

CLOSED (R,N):(J,F):(B,A):(O,I):(N,I):

(L,I):(E,I):(F,H):(D,C):(A,C):

(K,S):(I,S):(H,S):(C,S):(S,null):[]

PATH S:H:F:J:G:[]