

Key Sample-1(Page 1 of 2)

DEPTH-FIRST SEARCH: S -> G

Node Expanded	Unvisited Successors
S	['B', 'C', 'K']
B	['C', 'K', 'I']
C	['K', 'I', 'F', 'G']
F	['K', 'I', 'G', 'E', 'H', 'J']
E	['K', 'I', 'G', 'H', 'J']
G	['K', 'I', 'H', 'J']
	Solution path: S -> C -> G

A* SEARCH: S -> G

Node Expanded	Search Fringe (g+h=f)
S	C(6+8=14), K(9+5=14), B(6+9=15)
C	F(8+4=12), K(9+5=14), G(15+0=15), B(6+9=15)
F	K(9+5=14), E(15+0=15), G(15+0=15), B(6+9=15), H(14+10=24) I(15+9=24), J(18+7=25)
K	K(9+5=14), B(6+9=15), E(15+0=15), G(15+0=15), J(14+7=21) H(14+10=24), I(15+9=24)
B	E(15+0=15), G(15+0=15), B(11+9=20), I(11+9=20), K(15+5=20) J(14+7=21), H(14+10=24)
E	E(15+0=15), G(15+0=15), B(11+9=20), K(15+5=20), I(11+9=20) J(14+7=21), H(14+10=24)
G	[]
	Solution path: S -> C -> G

Key Sample-1(Page 2 of 2)

BREADTH-FIRST SEARCH: S -> G

Node Expanded	Search Fringe
S	['B', 'C', 'K']
B	['C', 'I', 'K']
C	['F', 'G', 'I', 'K']
K	['E', 'F', 'G', 'H', 'I', 'J']
I	['E', 'F', 'G', 'H', 'J']
F	['E', 'G', 'H', 'J']
G	[]
	Solution path: S -> C -> G

ITERATIVE DEEPENING SEARCH: S -> G (Depth Limit: 2)

Node Expanded	Search Fringe	Depth
S	[]	0
S	['B', 'C', 'K']	0
B	['C', 'I', 'S']	1
C	['B', 'F', 'G', 'K', 'S']	1
K	['C', 'E', 'F', 'H', 'J', 'S']	1
S	['B', 'C', 'K']	0
B	['C', 'I', 'S']	1
C	['B', 'F', 'G', 'K', 'S']	2
I	['B', 'F', 'H', 'J']	2
C	['B', 'F', 'G', 'K', 'S']	1
B	['C', 'I', 'S']	2
F	['C', 'E', 'H', 'I', 'J', 'K']	2
G	[]	2
	Solution path: S -> C -> G	