

Key Sample-5(Page 1 of 2)

DEPTH-FIRST SEARCH: S -> G

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

A* SEARCH: S -> G

Node Expanded	Search Fringe (g+h=f)
S	H(7+5=12), B(9+6=15), K(9+8=17)
H	B(9+6=15), I(11+4=15), K(9+8=17), C(16+5=21), F(17+5=22)
B	I(11+4=15), F(11+5=16), K(9+8=17), G(19+0=19), C(16+5=21) B(15+6=21)
I	E(13+2=15), F(11+5=16), G(17+0=17), K(9+8=17), J(13+7=20) C(16+5=21), B(15+6=21)
E	F(11+5=16), G(17+0=17), K(9+8=17), J(13+7=20), C(16+5=21) B(15+6=21)
F	G(17+0=17), K(9+8=17), J(13+7=20), C(16+5=21), B(15+6=21) F(16+5=21)
G	[]
	Solution path: S -> H -> I -> E -> G

Key Sample-5(Page 2 of 2)

BREADTH-FIRST SEARCH: S -> G

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

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

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