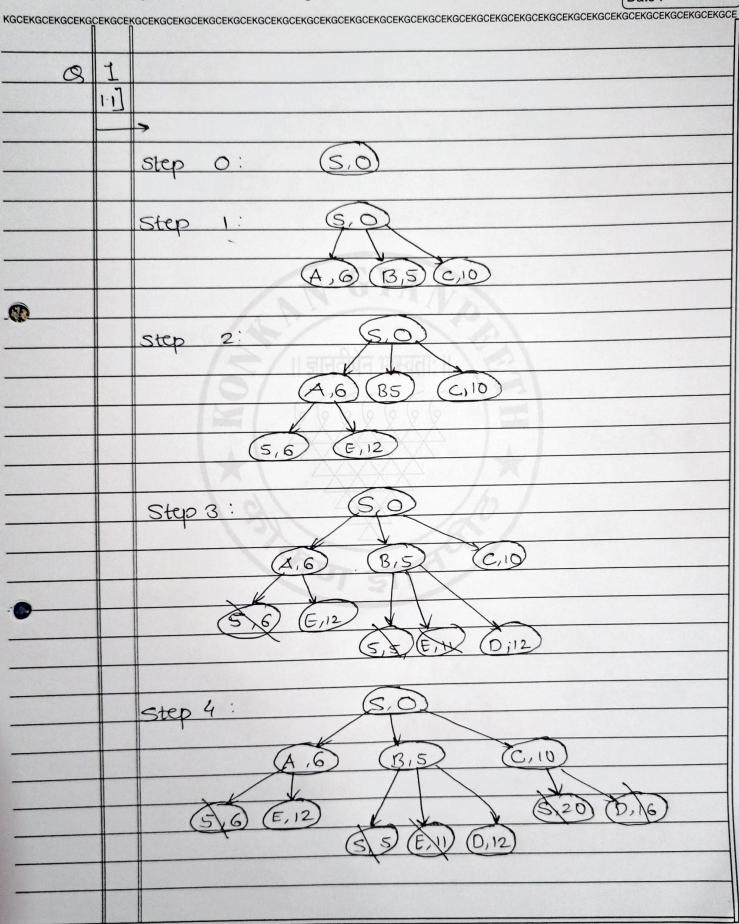
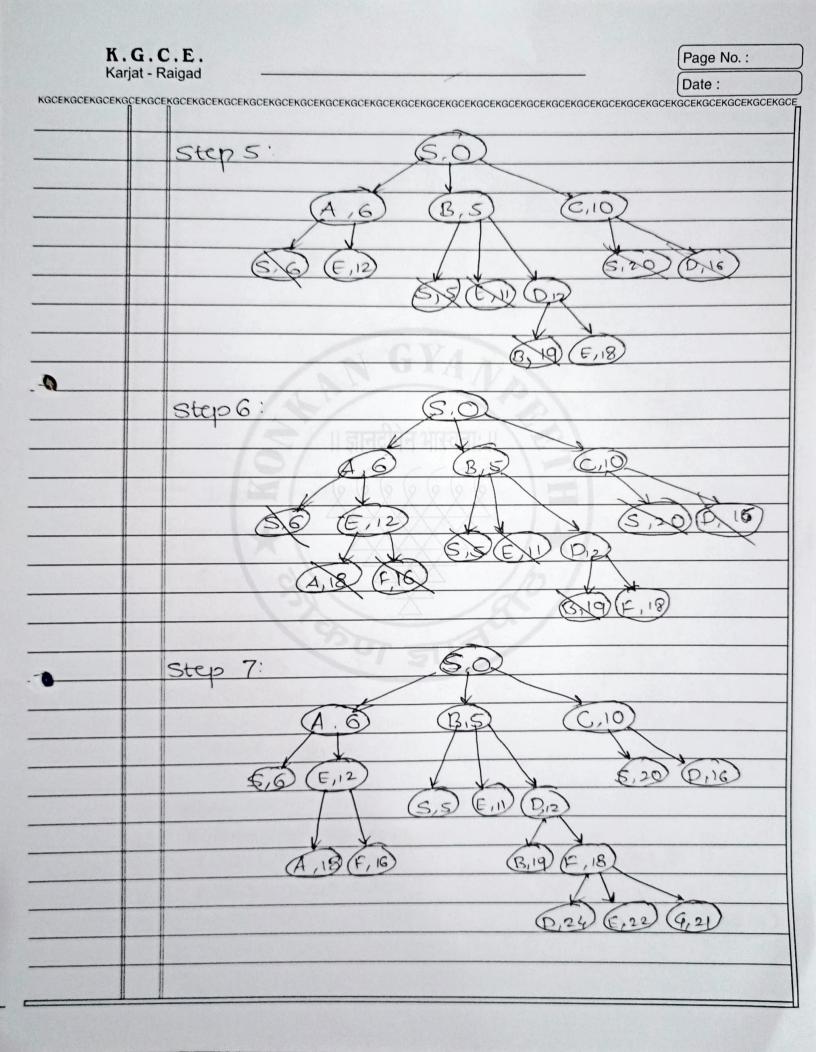
K.G.C.E. Page No.: Karjat - Raigad Date: Name: Rituraj K. Ghorat Class : BE-IT POILNO : 18 subject: Islab DOP DOA Marks

K.G.C.E. Karjat - Raigad Assignment - 1(A)

Page No.:

Date:





Narj	at - Raigad —————————————————————	rage No
GCEKGCEKGCEKGC	CEKGCEKGCEKGCEKGCEKGCEKGCEKGCEKGCEKGCEKG	Date:
		DENGOENGOENGOE
	Step 8: (5,0)	
	300	
	The state of the s	
	(A,6) (B,5) (C,10)	
	(S,6) (E,12) (S,26)	560
	(5,5) (F,1) (D,12)	0,10
	(3,3)(+11)(0,12)	
	A, 18 (E, 16) (B, 19) (F, 18)	
		\
	0,24(E,22)	(G, 2)
	। बान्सीम् अध्यासम्।	(41,5)
	1.4	
	Initialization: Compute f-sure f	ors & put i
	in the open list	
	f-sure $s: f(s) = h(s) = 17$ (S 17)
	Ciarli	
	Step 1:	
	f-sever of successors (5,1	72
	F(A) = h(A) = 10	L. J
	FCB) = h(B) = 13 (A,10) (B	3,13 C,4)
	FC0) = h(0) = 4	
		(17)
	F-SUM OF SUCCESSORS	
		13 (0,4)
	\$(0) = h(0 = 2.	
		(3,17) (82)
		(3,17) (82)

KGCEKGCEKGCEK	GCEKGCEKGCEKGCEKGCEKGCEKGCEKGCEKGCEKGCEK	te:
	TO THE PROPERTY OF THE PROPERT	GCEKGCEKGCEKGC
	Step 3: (5,17)	
	f-sure-of-successor	2
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	f(B) = h(B) = 13 (A,10)(B,13) (C,4)	
	(c(e) = h(e) = 1	
	F(F)=h(F)=1 (S,12)	2,2)
	- K	
	(F, J(B	13 C,4
	CVA	
-	Step 4: (5,17)	
	f-sux of successor	
	F(D) = h(p)=2 (A,10) (B,13) (C,1	4)
	F(E) = h(E)=4	1
	F(4) = h(4) = 0 (6.17)	0.2)
	E.) (3,13	(C,9)
	A da AAA //n	
	G10 P12 (E,4)
	186	
	5teps (S,17)	
	solution in-	
	5->c->p->=->4 with A10 (B13) (C)	
		*
	Solution cost: 10+6+6+3 (8,17)	02)
	= 25	
	(f,1) (B13	() (C, 4)
		3
	G10) B	2(€4)

K.G.C.E. Karjat - Raigad

Page No.:

KOOFKOOF	Date:
KGCEKGCEKGCEKG	CEKGCEKGCEKGCEKGCEKGCEKGCEKGCEKGCEKGCEKG
Q.	
7	
	The lowest path cost gcn) can be the cost to
	reach the good configuration in least steps
	In our case we can reach the final configured
	ion in at least 4 moves: Up, Up, LEFT, CEFF.
	Since all moves are equally costly we compute
	g(n) as
	90n) = 1+1+1+1
	g(n) = 14 regular annual $g(n) = 14$
	Consider the following 8 puzzle instance
	8 7 6
	2 1 5
	3 1
	Solution can be represented as
	{{8,7,6}{2,1,54,6,3,43} → {{8,7,63,62,1,53,13,-,43,3→
	{ \(\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
	[{8,7,-3/2,154{3,4,533}→ f{8,-,7}f2,1,63 £3,4,5}]→
	18-,8,73, 22,1,6353,4,533
	Since all the moves are equally costly the cost
	would be
	9(n) = 6.

K.G.C.E. Karjat - Raigad Page No.:

Date:

	ranjat ra	Date.
KGCEKGCEKG	CEKGCEKGCE	KGCEKGCEKGCEKGCEKGCEKGCEKGCEKGCEKGCEKGCE
	-7	
	C7	
	-3	8 76 Intial Config
		2 1 5
		3 4-
		5 4 -
		876 876
		2 1 5 2 1 -
		3 - 4 3 45
•		
5.7		8 7 6 8 7 6 8 7 6 8 7 6 8 7 6
		2 1 5 2 - 5 2 1 5 2 - 1 2 - 1 2 1 5
		. 2/
		- 3 4 3 4 3 4 - 34 5 3 4 5 3 4 -
		8-7 876
		216 21-
		3 4 5 3 45.
		-87 817 87-
		3 4 5 3 4 5.
	(6)	for i=1 n=initial state
		h I (initial) = Mispland tites count except
		Space
		h (Cinitial) = 4
		h (Cin)nar) = 9
		,
		h = goal state
		h1 (gow) =0

Page No.:

Date :

KGCEKGCEKGCEKG	DATE: GCEKGCEKGCEKGCEKGCEKGCEKGCEKGCEKGCEKGCEK
	THE PROPERTY OF THE PROPERTY O
	for i=2, n =initial state
	h 2 Cinitical) = correctly replaced files count except
	Space
	h2 (initial)=4
	for n = goal state
	h2(goal) = 8
	CV/
® ——	for i=3 n=initial state
	h3 (initial) = sum of monhattan distance between
	Current & correct position of cultiles
	except space
	h3 (initial) = 0 + 0 + 0 + 0 + 1 + 1 + 1 + 1
	= 4
	Fon = goal State
	h3(goal) = 0.
	1307 5111
0	