

Wellesly Road, Shivajinagar, Pune - 411 005

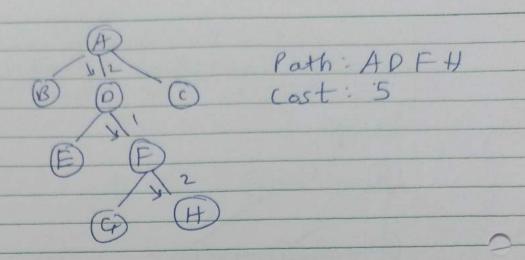
AI Assignment 3 Searching Strategies

	3 3.3
	Ctraph 1: Graph 2:
	Q-1-Q
	B-2 D+ G
	3 -1 2 3 D D + A
-	E G (H)

DES:				
Grapi	1 1 - 5	stort=A	Goal=H	
	223			
OL	N	CL	GT(N)	Succe.
A	A	A	F	BDC
BOC	B	AB	E	DA
pc	P	ABD	F	EFAB
EFC	E	ABDE	F	EN
FC	F	ABDEF	F	(1+1)
GHC	Cr	ABDEFG	F	JI XX
VIC		0 = = 4		



Wellesly Road, Shivajinagar, Pune - 411 005



Graph 2:

	OL	N	CL	G-TLN)	Succ(N)
	Δ	A	A	F	B
	B	B	A-B	F	CEA
	CE	C	ABC	F	PB
The second	DE	0	ABLD	F	FCX
	FE	F	ABCDF	F	QHE
-	HE	H	ABCDFH	T	1
	Name and Address of the Owner, where the Party of the Owner, where the Owner, which is the Owner,	Carried San Control of the Control o	CARLES AND ADDRESS OF THE PARTY	THE RESERVE THE PARTY OF THE PA	

it is minir	not	mal for Grand optimal for the	and it is	hzas ives 2	
DFS to f	is cor	solution.	it you	rontees	
IO-0	FS:-St	art = A	Goal =	Н	
A	0: N A	C L A	GT(N)	Succh	
	t found.				
Depth	T:	CL	CAT(N)	Succe	
A	the same of the sa	A	F	BDC	
BOC	В	AB	F		
OC	P	ABD	F		
-	C	ABDC	F		
		TO BE THE			
H Not found.					
(1) 1001					
() 1001				THE STREET	



	Dept	52:						
		1						
	OL	N	CL	GT(N)	Succe			
	A	A	A	F	BOC			
	BOC	B	AB.	F	DA			
	DADC	D	ABD	F				
	ADC	A	ABDA	1-				
	lo c	D	ABDAD	F	EFABA			
	EFABL	E	ABDADE	F				
	FABC	F	ABDADEF	F				
18	ABC	A	ABDADEFA	F	11 - 22 - 17-54			
	BC	В	ABDADEFAB	F				
	C	C /	ABDADEFABL	F	FA			
	FA	FA	BDADEFABLE	F				
	A	THE RESERVE OF THE PARTY OF THE	BDADEFABLFA	H F I				
		ot fo						

Depth	3 .			
OL	TN	LL	(FT(N)	Succ(N)
A	A	A	F	BDC
BOC	B	AB	F	DA
DAPC	0	ABD	F	EFAB
EFABAOL	E	ABDE	F	
FABADC	F	ABDEF	F	
ABADL	A	ABDEFA	F	
BADC	B	ABDEFAB	F	
ADC	A	ABDEFABA	F	BOC
BOCOC	B	ABDEFABAB	F	
ocpc	D	ABDEFABABD	F	
COC	D	AB DEFABABIC	P	
	C. SHEST CHARLES IN COLUMN			



	00	D	ABDEFABA	BOLD F	EFAB
	EFABC	E	A BDEFABABO	CDE F	FD
	FOFABL	F	ABDEFABABOO	DEF F	
	DEABC	D	HBD EFA BA BD	CDEFO	F
	FABL	F	4 BD E FABABO	CDEFDF	F GI+CD
	CHCOABC	Cr	ABDEFABABOC	OEF-01-4	F
	HCDABL	1+ 1	+ BDEFABABOO	DEFDFGH	7
			- SANDARTI		
- 1			A		
			MZ		A THE COLUMN TO THE
		B	0		
			M		the same of the same of
	(	3)	DO BOOK	)	Attack to the
		1	1171		
	00	A B	O O	3	
		00	B B B	Q (H) (U)	MAGUE
			9200		ASSOCIATION OF THE PROPERTY OF
	Pa	th:	APFIF		Nage Control
	Co	st:	5		
			SENGIAR		
	Graph	2: 5	start = A	Goal:	= 1+
	Pepth				
	OL	N	Car	CTION	) Succ(N)
	A	A	A	F	
	H Not	fou			
	Depth 1	L:	Something the second		
	OL	N	L1	LITIN	) Succell
	A	14	14	1	B
	B	B	AB		
		D	715		
- Charme	The state of the s			District Control of the Control of t	THE RESERVE THE PROPERTY OF THE PARTY OF THE



OL	N	CL	GTCN	Succe
A	A	A	F	B
B	B	AB	F	CEA
CEA	C	ABC	F	
EA	E	ABCE	F	
A	A	ABLEA	F	1
HNO	ot for	end		
Depth				( ( )
0'L	N		4T(N)	Succ(N)
A	A			B
B	B	AB	+	CEA
CEA	C	C ABC		DB
DBEA	D	ABLP		
BEA	B	ABLDB	t	560
EA	E	ABLOBE	F 9 9	F4B
-GBA	F	ABLOBEF	F	
GBA	G	AB LOBEFG	F	
BA	B	ABCDBEFGB	1	0
A	A	BAB CDB E FGBA	F	B
B	B	ABBLOBEFGBAB	F	



	Dept	h 7.			UN
	OL	N	CL	GT(N)	
	TA	A	A	F	B
	B	B	AB	F	LEA
*	CEA	C	ABC	F	PB
	DBEA	P	ABCD	F	FC FC
_	FLBEA	F	ABCDF	F	
	CBEA	C	ABLDFC	F	
	BEA	B	ABLDFCB	F	CEA
	CEAEA	C	ABLOFCBL	F	
	EAEA	E	ABLOFCBLE	F	
	AEA	A	ABLPFCBLEA	F	
	EA	E	ABCOFCBCEAE	F	FGB
	FGBA	F	ABLDFCBLEAFF	F	OHE
	DHEGBA	P	ABCDFCBCEAED	F	
Carle Co.	HEGBA	H	ABCOFLBCEAEDH	T	
		A			
		(B)	Path	: ABEI	= H
		V12			
	(1	(E)	A		
	1	1/1			
	(B)	72			
1	11	E) (4	B)		
1	1	Alt			
(F) 1	9 (D) (E) (B)		A		
		(D) (H)	5		



```
ID-DFS is optimal for Graph I
but not for graph 2
ID-DFS is not complete as
sometimes; t may not find the
solution
```

BFS:				
The Address of the Control of the Co	1: 5 to	vt=a C	roal=H	1
OL	N	CL	GTCNS	Succ(N)
A	A	A	F	BDC
BDC	B	AB	F	QA
dc	D	ABD	F	EFAB
CEF	C	ABOC	F	FA
EF	E	ABDLE	F	FP
F	F	ABDCEF	F	GHCD
GH	Cr	ABDCEF	F	HE
A	1+	ABDCEFH	T	××
	(A)			
	1,12			
	(3) (6)	(C) P	ath: 4	DFH
		Co	st: 5	
	E) F	3)		
		72		
	(	y'a		
	9			
		<b>经验证据</b>		



Wellesly Road, Shivajinagar, Pune - 411 005

1 Comph.	2: Star	t = A G	sal=H	
OL	N	CL	GTCNS	Succ(N)-
A	1+	A	F	B
B	B	AB	F	CEA -
CE	C	ABC	F	OB -
ED	E	ABCE	F	FGB -
OFG	D	ABLED	F	FC -
FG	F	ABLEDF	F	DHE
GH	G	ABLEPFL	F	IF E
H	1+	ABCEDFGH	7	* *
		ABANA I		
		A	900	
		VI.	Path .	ABEFIT
		<u> </u>	Cost.	,
		12	COST :	6
	(Č			
		1/2		
	(b)	(F) (G)		
		(H)		
A SECTION				
0 5 5	- / -	1 0		
B FS 1	s oft	mal for a t is 5, 1	raph	1, it
15 no Ad	optimo	el for G	raph 2	- as
minima	um cos	t is 5, l	out; t	gives 6

BFS is complete for both graphs

	100							T
	TUC	S: 1	5	0		- 1	- 11	
	Gra	ph I	Start	= /4		4 oal	= 14	
	OL		M	CL	4		Succe	
	(A,Q)	A	A		F		2) (0,2) (	
E,15 (B, 2)	0,2	C	AC		<u></u>		) (A, Z)	
(B/2) (D,3	(t,6)	B	ACBP		F	(E,5)	(F,3) (A,	4) (8,3)
(P, 1) (E, 5) (E,		E	ALBDE		F	(F4)	(0,8)	
(F,3)		F	ACBDI		F	(4,8)	CH, 6) (C	(9)(0,4)
CASO CH	.5)	G	A LBDE A CBDE		F	CH, O	) (F, \$/	
(H,5)		H	ACSUC	13				
			A°					
		2 (	0 36		0			
			5					2
			A P	3	*			
						0 4	4 0 5	
			3(G)	W (F)		(ost	ADF	- 1+
						Cost	- 3	
				The same				
	Gra	ph 2	: Star	H=A	C	roal	= +1	
				ALTO				

	A	earch				
	Croph	13				8) cc
		h	· ·	h	,	1
	A	6		3		5)
	B	6		3		6)
	C	7		2		
	0	6		2		
	E	7		2		
THE PARTY OF THE P	F	2				
	4 2					F
	4-1	0		0		
(p,6) (p,6) ( (p,6) (	Best F (C,7) (C,7) (C,7)(E,7)	N A B D F H	CL A AB ABD ABDF ABDFH	GT F F F T	(N) Succ(N) (B,6)(0,6)(C,7) (0,6) (A,6) (E,7)(F,2)(A,6)(B) (G,2) (H,0) (C,7)(D)	) [
		(F) (F)		Pai (os	th: ADFH t: 5	



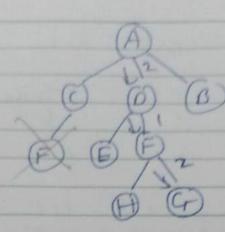
	Wellesly Road, Shivajinagar, Pune - 411 005					
	Best First Search optimal and comp	Lete				
A* search: h.						
(B,8)(0,	OL N CL GT(N) SUCC(N)  (A,6) A A F (B,8) (P,8) (B,8) (P,8)	(B,10)				
	B D C Cost: S  E E					
	in at is aptimal and complete  hi is not admissible as it is over estimating the cost  hi is not consistent as here  are jost > actual cast	rictic				



Wellesty Road, Shivajinagai, Fulle - 411 003
Best first Search: hz
(A,3) A A F $(B,3)(D,2)(C,2)$ - $(D,2)(C,2)(C,2)(C,2)(C,2)(C,2)(C,2)(C,2)(C$
(0,2)(C,2)(B,3) D AD F (E,2)(F,1)(A,3)(B,3) - (F)(E,2)(E,2)(B,3) F ADF F (C,1)(H,0)(C,2)(D,2) -
(F,1) (E,2) (E,2) (B,3) F A D F F (C,1) (H,0) (C,2) (D,2) - (H,0) (G,1) (C,2) (E,2) (B,3) H A D F H T
(H,0) (G,1) (C,0) (G,0) (G,0)
(A)
(B) Poth: 40FH
cast:5
A F
$\frac{\sqrt{2}}{(H)}$
(H) (G)
Best First Search is optimal and
complète:
A*:
OL N CL 4T(N) Succ(N)
(A3) A A F (B5) (2,4)(C3)
(C,3)(0,4)(B,5) C AC P (F,7)(A,5)
(0,4)(B,5)(F,7) D ACD F (E,7)(F,4)(A,7)(B,6)
(F,4) (B,5)(E,7) F ACOF F (G,6) (H,5) (C,10) (D,6)
(B,5)(H,5)(G,6)(E,7) B A LOFB F (0,5) (4,7)
(H,S) (G,6) (E,7) A ACOFBH T



Wellesly Road, Shivajinagar, Pune - 411 005



Poth : ADFG Cost: 5

: A\* is optimal and complete.

he is admissible as it never over estimates the cost he is not consistent as heuristic arc cost for EF is 1, but actual is -1

Graph 2:

h. h. h.

A 7 4

B 6 3

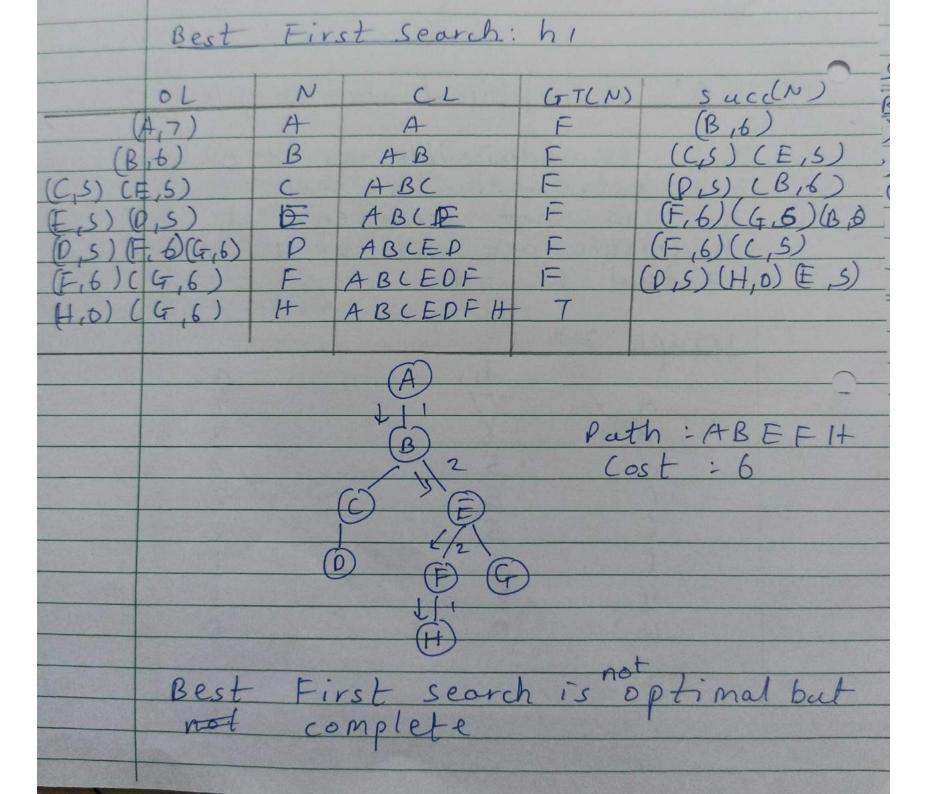
C 5 3

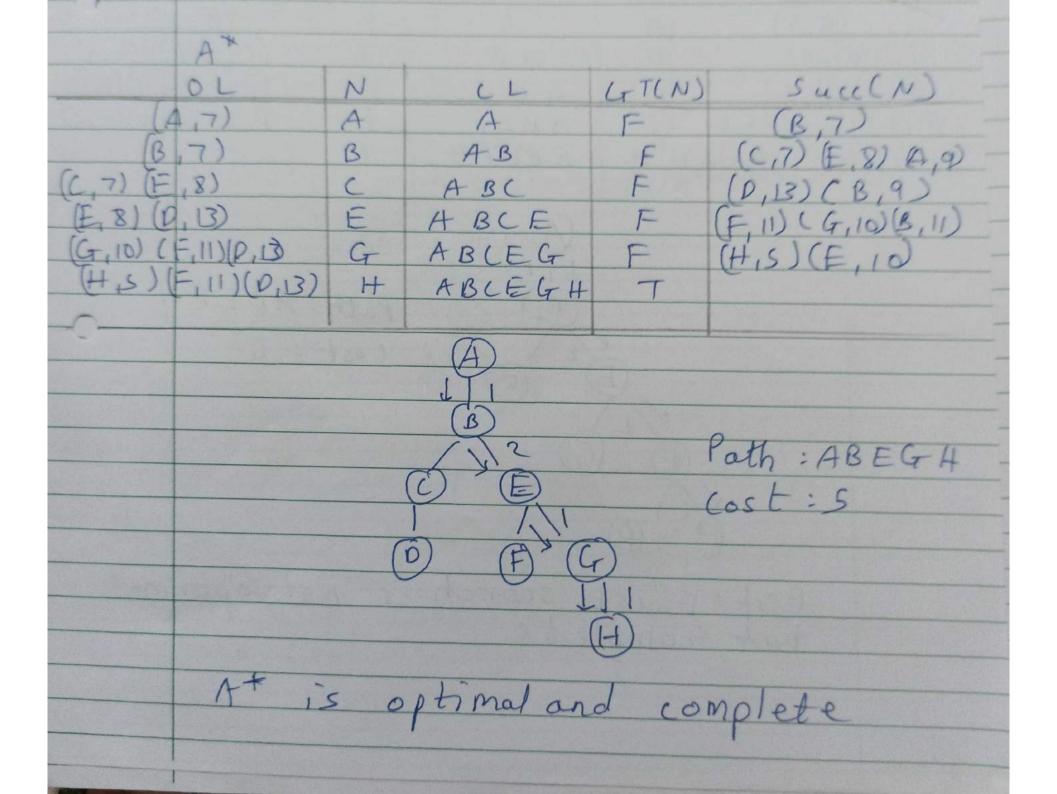
C 5 2

E 5 2

F 6 1

G 6 1







.明息

#### COEP TECHNOLOGICAL UNIVERSITY, PUNE

estima	tes 1	the cost					
h, is not consistent as heuristic wo							
Best First Search: hz							
OL	N	CL		Succles			
	Company of the last of the las			(B,3) (C,3)(E,2)(A,4)			
(.3)				(F.1)(4,1)(B)			
(1)((,3)	F		F	(0,2) (H,0)(E,2)			
(1) (0,2)(4,3)	1+	ABEFH	T				
		Co					
CO OU ABEEH							
Path: ABEFH  (8) Path: ABEFH  (ost: 6)							
(F) (c) (ost: 6							
(E) (G)							
A	(P)						
Best First search is not optimal							
but complete							
	Best 1  OL  (3)  (1) (0,2)(C,3)  (1) (0,2)(C,3)	est mates his is no orc cost  Best First  OL N $(3)$ B $(3)$ E $(1)((3)$ F $(1)((2)((3))$ H $(4)$ $(4)$ $(4)$ $(4)$ $(5)$ $(7)$ $($	Best First Search: h  OL N CL  4,4) A A  ABEF  (1) (0,2)(C,3) H ABEFH  (B)  (C)  (B)  (C)  (C)  (B)  (C)  (C)	Best First Search: hz  OL N CL GT(N) $A,5$ A F $A,5$ B ABF $A,3$ E ABF $A$ F $A$ BEFH $A$ T $A$ ABFF $A$ AB			

(C,5) (E,5) (E,5) (E	A *  O L  (A,4)  (E,5)  (A,4)  (E,5)  (A,4)  (E,5)  (A,4)  (E,5)  (A,4)  (E,6)  (E,0)  (E,6)  (E,0)  (E,6)  (E,0)  (E,6)	NABCEGIT	ABCEGH ABCEGH	GILMS FF FF F	Succ(N) (B,4) (C,5) (E,5)(A,5) (P,10) (B,6) (F,6) (4,5) (B,8) (H,5) (E,7)		
			A) L11 B C C C C C C C C C C C C C C C C C C	Poth .	ABEGH +S		
	h 2 is admissible as it never overestimates the cost he wistic arc cost a actual cost						