	THE SECRET	The state of	A THE ORIGINAL	
Question 1.				
Criven 184				T
1 KB CA	che de de de	AL 11.79	in w di	- The state of the
Direct-W			. or sinder	SALES CONTRACTOR OF THE SALES
line size = (
1 0-63./1024	650 0 F801-1		ر د ل د	C. C.
64-124	0 × 00	01	1 10 - 20-1	7 5-
16tin 128 - 191	-tag	index	offset	-
112 200	& bbit	4 bit	6 bit	-
128	500	0000		100
1	V		Lag index	offset
人—6481-7	1 0× 0001	Miss.	020 - 2000	
Bytes	< 0x 5002	+1:+.	K CHÎ	801010
- Larrida la	3 Ox 0003	tit.	1 4 119	1
1. 110	65 Ox 0041	Miss.	000 - 000	
9	129 0x 0051			0,0000
	161 0x 00 A1	Hit		depent
	193. Ox 00 CI	Miss.	000 0011	
	1025 0x 0401	Miss.	- 000 000 t	אמונאס
	1026.0x0402.	Hit	ठठठ: - १०४ ४	
	1 0x 0001	Miss	מסטם בים פסמם	
	3 0x 0003	Hit	מסט 0 מססט	the second secon
	3 0 x 0003	THIT.	1000 0000	
T	-,1,4	ed tas	Jir Alexand	
Cache Hits =	6	22/25 2	1-1-3	
	Hit satio = Griz =	1/2		
1 2 2 2 2 2				
	- Allay		3 42	
eteO				-
Page No.			and the same of th	

Question 2		
		A Line
Now cache is 2-way Associative		
	76.0	
1 0-63)		
(set 0 tag > set-inc	lov . O.	uset.
4 3		fset.
8set 64-127) set 1		
1/		i.
128-191 Zsetz		
		1
4.)	144	
1- 64 bytes ->		
Int big	Hit/ Miss	
0x 0001 1 000 -0-0000 001	Miss	4 5 1
0x 0002 2 000 0 - 0000 - 000 010	Hit.	-
0 × 0003 3 00 0 - 0000 - 000 011	Hit.	r di i
0x 0041 65 000-0001 -000001	Miss	1
0x 00x1 139 000-0010 -000001	Miss	
0x 00A1 161 00-0-0510-100001	tit.	21 1
0x 00 U 193 00-0-0511-000001	Miss	-
0x 000 1026 001-000 -000001	Miss	
0x 0402 1026 001-6000-000010	+11+	-Ç.
0× 0001 1 000-0-0000 -000001	+rit.	
0x 0009 2 000 - 0 000 0 000	Hit	
0× 0003 3 000-0-000 - 000 011	tlih	
	1	1
Cache Hits : - 7.	A. Carrier	
	i uman nivê	2
tit ratio: 7/12	1 1	1
	rass.	
Dale		
		and the second

	CHAN R
Question 3	
128 B cache.	
line size 16B	- 1
4-way Associative.	
Set o LRU! least Recently Used	1.
Set O LFU: least frequently used	
	13
Tr Set 1	
When LFU performs better-than LRU	
-> LFU Captures postern.	- 10
it there on no state ?	
if there is no such pattern (random) IRV porgoon better.	~~§
penos.	
16	
Let say A, B, C, D, E have same Set-inder dity	
Tag-	
a) LRU beffer than LAU	
Lets consider.	- 3
A,B,C,D,A,A,A,B,B,B,C,D,E,E,C,D	
V, V	
This case we can see LFU will replace C who	
12 Comes, but LRD replace A. The In you	1,1
- Cove LRU performed befor the 100 h.	17.7
there is no pattern.	
eiec)	(C)
ON ecef	

b) LEU performe better LRU	
less there in Loop, with some condition	
05.000 (8.1) 6.11	
C, C, A, B, C, D, A, B, A, B, B, B, B, B, C, D, A, DB, A, B.	10 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
C) - (10) - (1) -	
In this case	
when first time & in head we can see	
LRU Will replace C, but LPU will repl	ace
D as only used which is more hea	orable
do bis least used and troop Services of evene	
it is also not had frequently afterward	•
Freq.	
A:- 5	
B: -5	2
C!-4	
D:- 9	
B 1-1	
2 (- (
and -	
when 2nd Time D corner LRD sufface A, but LP replaces B, which again Good Choice according to given some coins of operation.	U
replaces A, which again Good Choice according	9
to given som comes of operation	9
	into process
oled)	
Page No.	

My Answer Justinaire same PA can be understood to extension of SA where what there is one put one Set an by unity PA ill just gives pic more space lines of the three for fauticular seriodex of will shill bestorm equality for Similar to cape that we did in author 5. Guestion 5: Cache : Swords. URO deplacement Strome [ine: 2 word A (20,21), (20,23) (20,23) 4 ine 2255, 20,23 (20,21) (20,21) L- 2 word -> 20 Mix 27 41it 21 tit 28 Mix 22 Miss 29 tit 23 Hit 30 Miss 35 Hit 41 Miss 36 Mith 30 Miss 37 Mith 31 Miss 38 Mith 48 Mith 31 tit vate:= 8/15						
more special lines of the unity PA ill just gives nice more special lines of the three for fauthcular Set index 9t will shill perform equality for Similar teal case that we did in auchion 5. Cache: 8 words. LRU subfacement Scheme [ine: 2 word Aline 20 00 131 30 91 21 15, 30131 30 91 21 15, 30131 30 91 21 11 + 11 28 Miss 22 Miss 29 + 11+ 23 + 11+ 24 Miss 50 Miss 25 Miss 50 Miss 26 Miss 50 Miss 27 Hit 41 48 Hit. 28 Miss 50 Miss 28 Hit 41 48 Hit. 29 Miss 50 Miss 20 Miss 50 Miss 21 Miss 50 Miss 22 Miss 50 Miss 23 Hit. 24 Miss 50 Miss 25 Miss 50 Miss 26 Miss 27 Hit. 27 Miss 50 Miss 28 Hit. 29 Miss 50 Miss 20 Miss 50 Miss 21 Miss 50 Miss 22 Miss 50 Miss 23 Hit. 41 Miss 50 Miss 24 Miss 50 Miss 25 Miss 50 Miss 26 Miss 50 Miss 27 Hit.	- Oustion 4:					
more special lines of the unity PA ill first gives for more special lines of the three for fauthcular set index. 9t will shill perform equality for Similar test cape that we did in auchion 5. Cache: 8 words. LRU subfacement Scheme [ine: 2 word A [20,21], (12,33) 4 line 22						
more special lines of the unity PA ill first gives are more special lines of the three for fauthallar set index git will shill perform escarting for Similar tas case that we did in auchion b. Cache: 8 words. LRU opplacement Steme [ine: 2 word A [20,21], (18,33) 4 line 22	My Answey, hetraine same i	A can be 1	induction !			
more special lines & to those of particular set index 9t will shill perform equality for Similar tut cape that we did in auchon 5. Quartion 5: Cache & Rwords. LRU paplacement Strome Line: 2 word (content a) and (content a) and (ine: 2 word (ine	as extension of SA where i	al la shalas				
Gustion Se (ache : 8 words. URU substance (ine: 2 word) (content at and) (conte	just one Set on by using	11 Bi 09	t Object	00		
Gustian Se (ache : 8 words. URU sublacement Scheme (ine: 2 word) (content at and 1 (20,21), (20,20) 4 line : 20,20 4 line : 20,20 21/25, 20,20 21/25, 20,20 20 Mix 87 + Hit 21 + Hit 28 Mix 22 Miss 29 Hit 23 + Hit 28 Hit 24 Miss 50 Miss 25 Hit 27 Hit 21 Miss 30 Miss 22 Miss 29 Hit 23 Hit 27 Hit 24 Miss 30 Miss 25 Miss 30 Miss 26 Miss 30 Hit 27 Hit 30 Miss 28 Hit 27 Hit 29 Miss 30 Hit 31 Hit 1	more space lines to the thomas	too toutou	Par Corio	anlan		
Gustiam Se (ache : 8 words. URU sublacement Scheme (ine: 2 word) (content at and 1 (20,21), (20,20) 4 line: 2 (20,21) 22/55, 20/31 22/55, 20/31 20/51 20/	9+ will bestom come	La Sim	silas de	LICITA		
Gustian Se (ache : 8 words. URU substance (ine: 2 word) (content at and) (conte	- cape that we did in auchon	1 2 ps ain	THE LES			
(ache: 8:00rds. LRU 900 polacomena Scheme Line: 2 200 rd (content at end 1 (20,21), (20,20) 4 line 24/23, 20131 22, 23 24/25, 20131 20, 21 20 Mix 27 + Hit 21 + Hit 28 Mix 22 Miss 29 + Hit 23 + Hit 28 Hit 24 Miss 50 Miss 25 Miss 50 Miss 26 Miss 50 Miss 27 Miss 50 Miss 28 Hit 21 Miss 50 Miss 28 Hit 21 Miss 50 Miss 29 Hit 31 Hit		1.01				
(ache: 8:00rds. LRU 9stplacement Scheme Line: 2:00rd (ontent at and 1 (20,21), (20,23) 4 line 22/5, 30/31 25/29, 220,21) 20 Mix 27 + 1iit 21 + 1iit 28 Miss 22 Miss 29 + 1iit 23 + 1it 28 Miss 24 Miss 50 Miss 25 Miss 50 Miss 26 Miss 50 Miss 27 Miss 50 Miss 28 Hit 21 Miss 50 Miss 28 Hit 21 Miss 50 Miss 29 Hit 31 Hit 32 Miss 20 Miss 50 Miss 21 Miss 50 Miss 22 Miss 50 Miss 23 Hit 21 Miss 24 Miss 50 Miss 25 Miss 50 Miss						
(ache: 8:00rds. LRU 9stplacement Scheme Line: 2:00rd (ontent at and 1 (20,21), (20,23) 4 line 22/5, 30/31 25/29, 220,21) 20 Mix 27 + 1iit 21 + 1iit 28 Miss 22 Miss 29 + 1iit 23 + 1it 28 Miss 24 Miss 50 Miss 25 Miss 50 Miss 26 Miss 50 Miss 27 Miss 50 Miss 28 Hit 21 Miss 50 Miss 28 Hit 21 Miss 50 Miss 29 Hit 31 Hit 32 Miss 20 Miss 50 Miss 21 Miss 50 Miss 22 Miss 50 Miss 23 Hit 21 Miss 24 Miss 50 Miss 25 Miss 50 Miss	- Question 50		-			
CRU sapolacement Scheme Content at and (20,21), (25,29) 28,29 41 22/23, 22,23 24/25, 30/31 30,31 24/27, (20,21) 20,21 20 Mix 27 + 411 21 + 11 28 Mix 22 Miss 29 + 11 23 + 11 28 Mix 24 Miss 30 Miss 25 Miss 30 Miss 26 Miss 30 Miss 27 411 28 Miss 30 Miss 29 411 20 Miss 30 Miss 31 + 11 41 miss 31 41 miss						
CRU satolacement Scheme Content at and (20,21), (25,29) 28,29 41 22/23, 22,23 21/25, 30/31 30,31 22 20,21 20,21 22 Miss 29 411+ 23 41+ 28 Miss 30 Miss 24 Miss 30 Miss 25 Miss 30 Miss 26 Miss 30 Miss 27 411+ 28 Miss 30 Miss 29 Miss 30 Miss 31 41+ 41 70te := 8/15 41 7	- Cache: Swords.	Cache: 8 words				
(onlent at end (conlent at end (conlen			The state of the s			
(content at end (content at end 4 line 22,23 24/23, 20/31 24/23, 20/31 25/23, 20/21) 20 Mix 27 + Hit 21 + Hit 28 Mix 22 Miss 29 + Hit 23 + Hit 28 Hit 24 Miss 50 Miss 25 Miss 39 Hit 26 Miss 50 Miss 27 Hit 28 Miss 30 Miss 29 Hit 21 Miss 30 Miss 22 Miss 30 Miss 23 Hit 24 Miss 30 Miss 25 Miss 30 Miss 26 Miss 30 Miss 27 Hit 28 Miss 30 Miss 29 Hit 20 Miss 30 Miss 21 Miss 30 Miss 22 Miss 30 Miss 23 Hit 24 Miss 30 Miss	Line: 2 word			161		
4 line 2/23, 22/23 4 line 2/23, 20/31 20,21 2/25, 30/31 20,21 20 Mix 27 +111 21 +11+ 28 Mix 22 Miss 29 +11+ 23 +11+ 28 Hit 24 Miss 50 Miss 25 Miss 30 Miss 26 Hit 27 Miss 30 Miss 27 Miss 30 Miss 30 Miss 28 Hit 27 Miss 30		Content at a	nd			
4 line 24/25, 30/31	(20,21), (28,29)					
20 Mix 87 + +1it 21 +1it 28 Mix 22 Miss 29 +1it 23 +1it 30 Miss 84 Miss 50 Miss 85 +1it 21 Miss 26 Miss 30 Miss 31 +1it 31 Miss 27 Miss 30 Miss 28 Miss 30 Miss 31 +1it 3	- 400					
20 Mix 87 + +1it 21 +1it 28 Mix 22 Miss 29 +1it 23 +1it 30 Miss 84 Miss 50 Miss 85 +1it 21 Miss 26 Miss 30 Miss 31 +1it 31 Miss 27 Miss 30 Miss 28 Miss 30 Miss 31 +1it 3	24/35, 30/31	30,31				
20 Mix 87 + Hit 21 thit 28 Mix 22 Miss 29 Hit 23 Hit 27 Hit 24 Miss 30 Miss 25 Miss 30 Miss 26 Hit 31 Miss 27 Hit 28 Miss 30 Miss 29 Hit 21 Miss 31 Hit 31 Hit	26 (27, (20,21)					
21 thit 28 Miss 22 Miss 29 thit 23 thit 28 Hit. 24 Miss 30 Miss 25 Hit. 21 Miss 26 Miss 23 Hit. 27 Thir. 28 Miss 30 Miss 29 Thit. 29 Thit. 20 This series are series are series are series.	∠— 2 word →					
21 thit 28 Miss 22 Miss 29 thit 23 thit 28 Hit. 24 Miss 30 Miss 25 Miss 30 Miss 26 Miss 23 Hit. 26 Miss 23 Hit. 27 Thir rate:= 8/15	20 Mix 27	4lit				
22 Miss 29 Hit 23 Hit 22 Hit 24 Miss 30 Miss 26 Hit 21 Miss 26 Miss 23 Hit 31 Hit 3 Hit rate:= 8/15	21 tlit 28					
23 tht 28 thit. 24 Miss 50 Miss 25 Miss 26 Miss 27 Miss 28 Miss 29 Mit 31 Mit 41 rate:= 8/15	1/1/27					
84 Miss 50 Miss 85 Hit 21 Miss 26 Miss 23 Hit 31 Hit 1	1111		The second of th			
88 Hit . 21 Miss 26 Miss 23 Hit . 31 Hit .	1/103					
26 Migs 23 Hit. 31 Hit. Hilt rate:= 8/15	V					
31 Hit. 1 Hilt rate:= 8/15	26 Miss 23	The state of the s	The second secon			
tlit rate:= 8/15						
Date		, 111				
Date 1	tlit rate := 8/15					
CM ege4	Date	The second secon				

						110
	Grant Control of the		, , ,	*		
	Questien	6	Teach and the second			
	2-wwg	associative	cache.			
X				final sta	K	
X	(2	0,21)/(28)29))	25, 29		The state of the s
	41me (24,25	0/(20,21)	•	20,21		
	(22	, 23) (30,31)		30,31		
	1 (26,23	1) / (22,23)		22,2	3_/	
	5-2	mo-d-3				
	1	0, 11				
	Ler so	म नी व्यवकृ	er no ani	ik by 4 úts	s dit o	
	elle	ser 1.				
	ಇ 0	N.C.	29	411		
	21	Miss.	3 2	十二十一十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十		
	22	Mia	30	Miss		-
	23	+1,+	21			
4	<i>ڪ</i> لا	Miss	23	Miss.		
1	25	Hit	31	Hit.		
T I	26	Miss				
	47.	tit.				
9	as .	Miss				
	1					The second secon
	+1.+	- ratio = 7	1			
			/ 13			a summer and a sum
	7.5					
		1 sied				
		Page No.			and the second	