NPTEL » Operating System



About the Course Announcements

Ask a Question

Progress

Mentor

Unit 11 - Week 10

Course outline	Assignment 10		
How does an NPTEL online course work?	The due date for submitting this assignment has passed. As per our records you have not submitted this assignment.		
Week 1			
Week 2	It is always beneficial in terms of timing efficiency to have demand paging than to load the pages from disk right a True False		
Week 3			
week 3	No, the answer is incorrect.		
Week 4	Score: 0 Accepted Answers:		
Week 5	False		
Week 6	2) Which of the following is true about demand paging?		
Week 7	It requires hardware support to implement demand paging		
	It can be completely implemented in software.		
Week 8	Sum total of the number of valid pages in all the page tables still can't exceed total number of memory frames		
Week 9 Sum total of the number of valid pages in all the page tables still can now exceed total number of valid pages. No, the answer is incorrect.			
Week 10	Score: 0 Accepted Answers:		
Cunchronization in w.C.	It can be completely implemented in software.		
 Synchronization in xv6: acquire/release, sleep/wakeup, exit/wait 	Sum total of the number of valid pages in all the page tables still can now exceed total number of memory frames.		
 More synchronization in xv6: kill, IDE device driver; introducion to Demand Paging 3) In terms of locality select the correct options for the memory locations in the following programmes in the following programm			
 Demand Paging; Introduction to Page Replacement 	int sum = 0; for (int i = 0; i < 1000; i++) {		
 Page Replacement, Thrashing 	5		
○ Quiz : Assignment 10	8		
○ Week 10 Feedback Form			
Week 11	sum has temporal locality		
	i has temporal locality		
Week 12	elements of arr has temporal locality elements of arr has spatial locality		
Assignment Solution	No, the answer is incorrect. Score: 0		
Download Videos	Accepted Answers: sum has temporal locality		
Text Transcripts	i has temporal locality		
	elements of arr has spatial locality		
	4) If the memory access time is denoted by 'ma' and 'p' is the probability of a page fault (0 <= p <= 1) caused by the		
	access time in expectation for a demand paging enabled memory is?		
	p x ma + (1-p) x page fault time		
	ma + page fault time		
	(1-p) x ma + p x page fault time		
	ma + p x page fault overhead time		
	No. the annual is incomed		

TI	Assignment 10 he due date for submitting this assignment has passed. s per our records you have not submitted this assignment.	Due on 2020-04-08, 23:59	IST.
	It is always beneficial in terms of timing efficiency to have demand paging than to load the pages from disk right a	away on program startup?	1 poin
	○ True	,	. ,
	O False lo, the answer is incorrect.		
S	core: 0		
F	alse		
2)	Which of the following is true about demand paging?		1 poin
	It requires hardware support to implement demand paging It can be completely implemented in software.		
	Sum total of the number of valid pages in all the page tables still can't exceed total number of memory frames Sum total of the number of valid pages in all the page tables still can now exceed total number of memory frame	e	
	lo, the answer is incorrect.	5.	
Α	core: 0 ccepted Answers: can be completely implemented in software.		
S	tum total of the number of valid pages in all the page tables still can now exceed total number of memory rames.		
	In terms of locality select the correct options for the memory locations in the following program.		1 poin
1			
234	<pre>int sum = 0; for (int i = 0; i < 1000; i++) { sum = sum + arr[i]; }</pre>		
	sum = sum + arr[i]; }		
	sum has temporal locality		
	i has temporal locality		
	elements of arr has temporal locality elements of arr has spatial locality		
	lo, the answer is incorrect.		
Α	accepted Answers: um has temporal locality		
il	has temporal locality lements of arr has spatial locality		
4)	If the memory access time is denoted by 'ma' and 'p' is the probability of a page fault (0 <= p <= 1) caused by the	swapped out pages. Then the	1 poin
	ess time in expectation for a demand paging enabled memory is?		
	p x ma + (1-p) x page fault time ma + page fault time		
	(1-p) x ma + p x page fault time ma + p x page fault overhead time		
N	lo, the answer is incorrect.		
Α	ccepted Answers: (-p) x ma + p x page fault time		
	na + p x page fault overhead time		
5)	Select all the correct statements true for the page replacement policy?		1 poin
	2nd chance algorithm is an approximation for LRU algorithm Nth chance algorithm is a better approximation for LRU algorithm, where N > 2		
	LRU is itself a heuristic for the optimal page replacement algorithm		
	lo, the answer is incorrect. core: 0		
2	ccepted Answers: nd chance algorithm is an approximation for LRU algorithm		
	Ith chance algorithm is a better approximation for LRU algorithm, where N > 2 RU is itself a heuristic for the optimal page replacement algorithm		
6)	Which of the following synchronization abstractions (or their equivalent) are used in xv6?		1 poin
	Mutex Lock		
	Conditional variables Semaphores		
	Monitors		
S	lo, the answer is incorrect.		
N	Accepted Answers: Mutex Lock Conditional variables		
	Thrashing the CPU utilization.		1 poin
	increases		i poiii
	keeps constant decreases		
	lo, the answer is incorrect.		
Α	ccepted Answers:		
8)	When is a process said to be thrashing?		1 poin
	it spends a lot of time executing, rather than paging it spends a lot of time paging than executing		
	it has lots of misses in terms of pages prefetched by OS it has lots of hits in terms of pages prefetched by OS		
N	lo, the answer is incorrect.		
Α	core: 0 ccepted Answers: spends a lot of time paging than executing		
	The working set model is used to estimate the average number of frames a job will need in memory in order to rui shing.	n smoothly without causing	1 poin
	○ True		
	C False		
S A	lo, the answer is incorrect. core: 0 ccepted Answers:		