Hđh2 - Yeb

Hệ điều hành (Trường Đại học Sư phạm Kỹ Thuật Thành phố Hồ Chí Minh)

Thời gian còn lại 0:54:18

Câu hỏi 1

Câu trả lời đã được lưu
Đạt điểm 1,0

Đặt cờ

Đoạn văn câu hỏi

A memory management unit performs memory-mapping by converting a logical address into a physical address, with the help of _____

Select one:

limit registers

base registers

none

base and limit registers

Clear my choice

Câu hỏi 2

Câu trả lời đã được lưu
Đạt điểm 1,0

Đặt cờ

Đoạn văn câu hỏi

.FIFO scheduling is

Select one:

Fair-share scheduling

Deadline scheduling

Non-preemptive scheduling

Preemptive scheduling

Clear my choice

Câu hỏi 3

Câu trả lời đã được lưu
Đạt điểm 1,0

Đặt cờ

Đoạn văn câu hỏi

The requirements for solving a Critical Section problem are:

Select one or more:

bounded waiting

mutual exclusion

progress

Câu hỏi 4

Câu trả lời đã được lưu
Đạt điểm 1,0

Đặt cờ

Đoạn văn câu hỏi

.Which of the following variable wait within the to enable a process

Select one:

all of the mentioned

objects Boolean objects can be used by condition variables

a condition is defined by a condition variable

semaphore must be used

Clear my choice

Câu hỏi 5

Câu trả lời đã được lưu
Đạt điểm 1,0

Đặt cờ

Đoạn văn câu hỏi

Which of the following is NOT true for plans to prevent and avoid deadlock?

Select one:

In the case of deadlock avoidance, resource requests are always granted if the resulting state is safe

Avoid deadlock is less restrictive than preventing deadlock

Avoid deadlock requires prior knowledge of resource requirements

In the deadlock prevention, resource requests are always accepted if the resulting state is safe

Clear my choice

Câu hỏi 6

Câu trả lời đã được lưu
Đạt điểm 1,0

Xóa cờ

Đoạn văn câu hỏi

Trả lời a page table is a data structure used to store the bas

Câu hỏi 7

Câu trả lời đã được lưu
Đạt điểm 1,0

Đặt cờ

Đoạn văn câu hỏi

.Process synchronization can be done on which of the following levels

Select one:

software

none of the mentioned

hardware

both hardware and software

Clear my choice

Câu hỏi 8

Chưa trả lời
Đạt điểm 1,0

Đặt cờ

Đoạn văn câu hỏi

There are Trả lời two memory accesses in paging

Câu hỏi 9

Chưa trả lời
Đạt điểm 1,0

Xóa cờ

Đoạn văn câu hỏi

The valid-invalid bit is used in the page table to mark a page as valid or invalid. Trả lời means the page is being referred to by the process

Consider the two processes P1 and P2 accessing the shared variables X and Y protected by the binary semaphore S1 and S2 respectively, both initiated by 1. The pseudocode of P1 and P2 are follows:

P1:

```
while(true){
  L1: ......
  L2: ......
  X = X + 1;
  Y = Y - 1;
  signal(S1);
  signal(S2);
}
```

P2:

```
while(true){
  L3: ......
  L4: ......
  Y = Y + 1;
  X = Y - 1;
  signal(S2);
  signal(S1);
}
```

To avoid deadlock, the correct operations at L1, L2, L3, L4 are, respectively?

Select one:

wait(S1); wait(S1); wait(S2); wait(S2);

wait(S2); wait(S1); wait(S1); wait(S2);

wait(S1); wait(S2); wait(S2); wait(S1);

wait(S1); wait(S2); wait(S1); wait(S2);

Clear my choice

.When high priority task is indirectly preempted by medium priority the scenario is called

Select one:

priority modification

priority removal

priority inversion

priority exchange

A system with 32-bit logical address uses a two-level page table structure. It uses page size of 2^{10}. The outer page table or directory is accessed with 8 bits of the address. How many bits are required to access the page table? Trả lời 2^25

Fixed partitioning method suffers from both internal and external fragmentation.

.Which of the following for Mutual exclusion can be provided by the

Select one:

none of the mentioned

mutex locks

binary semaphores

both mutex locks and binary semaphores

Fixed partitioning is a method of partitioning the memory at the time of _____

Select one:

run-time

none

system generation

compilation

In a paging scheme, 16-bit addresses are used with a page size of 512 bytes. If the logical address is 0000010001111101.

The physical address will be 0001110001111101 , if the frame address corresponding to the computed page number is 15.

Hardware support for the Trả lời paging concept is provided by the PTBR and the PTLR.

The 'Circular wait' condition can be prevented by

Select one:

using thread

using pipe

Define a linear order of resource types and enter the resource level

all not correct

A page table entry provides base address

If the size of a process is an exact multiple of page size chosen, there will not be any _____ fragmentation.

Select one:

internal and external both

internal

external

none

The swap space is reserved in _____

Select one:

any secondary storage

the main memory

none

the hard disk

starvation is a problem that is addressed when considering concurrent processes, which are closely related to deadlock

In a system, there are three processes, P1, P2, and P3, divided into 32, 189, and 65 pages, respectively. If there are 115 frames in the memory, then the proportions in which the frames will be allocated to the processes are

Select one:

13, 76, 26

18, 70, 27

11, 72, 21

13, 72, 24

The two types of semaphore are binary and counting

.Which of the following option is suitable when a process is executing in its critical section, then no other processes can be executing in their critical section

Select one:

synchronous exclusion

mutual exclusion

asynchronous exclusion

critical exclusion

Clear my choice

The value of a counting semaphore is 12 at a particular time of computation. Then 14 P operations and “x” V operations were performed on this semaphore. If the final value of semaphore is 5, x will be Trả lời 7

To avoid deadlock

Select one:

resource allocation needs to be done only once

All deadlocked processes need to be removed

only allocate resources to processes holding resources

a set number of allocated resources are required

demand paging is to load only those pages in the memory that are needed at an instant of time of execution.

.A semaphore is a shared integer variable that can not

Select one:

drop below one

be more than zero

that cannot be more than one

drop below zero

There is a system with 64 pages of 512 bytes page size and a physical memory of 32 frames. How many bits are required in the logical address? Trả lời 15

.Scheduling algorithms that work on complex :

Select one:

uses most resources

all of the mentioned

uses few resources

are suitable for large computers

.How can we avoid deadlock

Select one:

there must be a fixed number of resources to allocate

all deadlock process must be aborted

inversion technique can be used

resource allocation must be done at once

Larger the page size _____ will be the memory wastage.

Select one:

the less

no effect

none

the mor

In fixed partitioning, the partition size can be of

Select one:

fixed size

none

fixed as well as variable

variable size

Whenever a resource allocation request cannot be granted immediately, the deadlock detection algorithm is invoked. This will help identify:

Select one:

Specific processes cause deadlock

set of deadlocked processes

set of processes in the deadlock queue

All correct

.Synchronization tool is?

Select one:

semaphore

pipe

socket

thread

.Which of the following is not a part of the operating system?

Select one:

Input/output control program

Supervisor

Job control program

Performance monitor

What is the effective memory access time if a 32-bit system uses a 2-level paging scheme. Assuming the TLB hit ratio is 98%, it takes 15 ns to search the TLB and 100 ns to access the memory.

Select one:

119 ns

120 ns

122 ns

124 ns

.Scheduling algorithm in multilevel feedback

Select one:

none of the mentioned

classification of the ready queue is permanent

processes are not classified into groups

a process can move to a different classified ready queue...

Clear my choice

Câu trả lời đã được lưu
Đạt điểm 1,0

Đặt cờ

Đoạn văn câu hỏi

Memory mapping through TLB is known as ___

Select one:

TLB mapping

physical mapping

none

associative mapping

Pages and frames are equal in size.

Consider a system with the following information.
R1 has 5 instances, R2 has 6 instances, R3 has 4 instance.

	ALLOCATION			REQUEST		
Process	**R1**	**R2**	**R3**	**R1**	**R2**	**R3**
P1	1	0	2	1	0	0
P2	1	1	0	4	0	2
P3	1	1	0	0	1	2

Process	R1	R2	R3	R1	R2	R3
P4	0	2	1	2	1	0
P5	1	2	0	3	1	4

What is the safe sequence?

Select one:

{P1, P4, P3, P5, P2}

{P3, P1, P4, P2, P5}

{P1, P3, P4, P5, P2}

{ }

Clear my choice

There are 128 pages in a logical address space, with a page size of 1024 bytes. How many bits will be there in the logical address?

Answer: 2^20

Belady's anomaly is observed in the _____ algorithm

Select one:

OPT

FIFO

CLOCK

LRU

In a paging scheme, 16-bit addresses are used with a page size of 512 bytes. If the logical address is 0000010001111101.

The offset is 125 .

In a paging scheme, 16-bit addresses are used with a page size of 512 bytes. If the logical address is 0000010001111101.

The page number is 2

The downside of calling a deadlock detection algorithm for every request is:

Select one:

all correct

Significant costs during calculation.

consumes excess time in requests allocated memory

cost of deadlock detection algorithm due to memory consumption

There is a system with 64 pages of 512 bytes page size and a physical memory of 32 frames. Thus, there is Trả lời 14 bits are required in the physical address.

.Trap is a/an

Select one:

Asynchronous interrupt

Synchronous interrupt

Hardware interrupt

Operating system’s interrupt

Clear my choice

Buddy system là một sự thỏa hiệp giữa _____

Select one:

các tùy chọn còn lại đều sai

phân trang và phân đoạn

phân vùng cố định và phân vùng động

phân mảnh ngoại và phân mảnh nội