

Quiz 05

Thursday, 13 October 2022 11:51

The mapping of a logical address to a physical address is done dynamically in

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- ☐ a. load-time binding
- ☐ b. compile-time binding
- ☒ c. execution-time binding

Which dynamic storage-allocation policy results in the largest leftover hole in memory?

Which dynamic storage-allocation policy results in the largest leftover hole in memory?

- ☐ a. First fit
- ☒ b. Worst fits
- ☐ c. Best fit

Which of the following memory allocation methods may result in external fragmentation?

Which of the following memory allocation methods may result in external fragmentation?

- ☐ a. Both paging and segmentation
- ☐ b. Paging
- ☒ c. Both dynamic partitioning & segmentation
- ☐ d. Both dynamic partitioning & paging

Considering a logical address with a page size of 8 KB, how many bits must be used to represent the page offset in the logical address?

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- ☒ a. 13
- ☐ b. 10
- ☐ c. 8
- ☐ d. 12

Which of the following memory allocation methods may result in internal fragmentation?

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- ☐ a. Dynamic partitioning
- ☒ b. Paging
- ☐ c. Segmentation

Which dynamic storage-allocation policy has least overhead?

Which dynamic storage-allocation policy has least overhead?

- ☐ a. Worst fits
- ☐ b. Best fit
- ☒ c. First fit

Which of the following statement about memory compaction is true?

Which of the following statement about memory compaction is true?

- ☐ a. It can be done at compile, load, or execution time.
- ☒ b. It is possible only if address binding is dynamic and done at execution time.
- ☐ c. It does not shuffle memory contents.
- ☐ d. It is used to solve the problem of internal fragmentation.

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Re-locatable code will be generated for

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- ☒ a. execution-time binding
- ☐ b. load-time binding
- ☐ c. compile-time binding

Memory compaction can be performed if address binding is done in

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- ☐ a. compile-time
- ☒ b. execution-time
- ☐ c. load-time

Which of the following memory allocation approaches assumes logical address space of a process is contiguous?

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- ☐ a. Dynamic partitioning
- ☐ b. Paging
- ☐ c. Segmentation
- ☒ d. All the above

Which of the following memory allocation approaches allocates contiguous memory space for a process?

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- ☒ a. Dynamic partitioning
- ☐ b. Paging
- ☐ c. Segmentation
- ☐ d. All the above

Which dynamic storage-allocation policy results in the smallest leftover hole in memory?

Which dynamic storage-allocation policy results in the smallest leftover hole in memory?

- ☐ a. Worst fits
- ☒ b. Best fit
- ☐ c. First fit

Logical address and physical address will be the same if address binding is performed in

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- ☐ compile-time
- ☐ load-time
- ☐ execution-time
- ☒ both compile-time and load-time

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Given the logical address 0xAEF9 (in hexadecimal) with a page size of 256 bytes, what is the page offset?

Given the logical address 0xAEF9 (in hexadecimal) with a page size of 256 bytes, what is the page offset?

- ☐ a. 0X9
- ☒ b. 0XF9
- ☐ c. 0xAF9
- ☐ d. 0xAE

Given the logical address 0xAEF9 (in hexadecimal) with a page size of 256 bytes, what is the page number of this logical address?

Given the logical address 0xAEF9 (in hexadecimal) with a page size of 256 bytes, what is the page number of this logical address?

- ☒ a. 0xAE
- ☐ b. 0xA
- ☐ c. 0X9
- ☐ d. 0xF9