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**CS-501**

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# DEMAND SEGMENTATION

# Demand Segmentation

- Operating system also uses *demand segmentation*, which is similar to demand paging.
- Operating system to uses demand segmentation where there is *insufficient* hardware available to implement 'Demand Paging'.

# Demand Segmentation

- The *segment table* has a valid bit to specify if the segment is already in physical memory or not.
- If a segment is not in physical memory then *segment fault* results, which traps to the operating system and brings the needed segment into physical memory, much like a page fault.

# Demand Segmentation

- *Demand segmentation* allows for pages that are often referenced with each other to be brought into memory together, this decreases the number of page faults.

# Homework

- Cache memory organization

# References

1. Silberschatz, Galvin and Gagne, “Operating Systems Concepts”, Wiley.
2. William Stallings, “Operating Systems: Internals and Design Principles”, 6<sup>th</sup> Edition, Pearson Education.
3. D M Dhamdhere, “Operating Systems: A Concept based Approach”, 2<sup>nd</sup> Edition, TMH.

**Thank You.**

