LOCKING

1. What is the locking rule?
2. Process 1 wants to write to variable A. Process 2 wants to read variable B. Who lock?
3. Process 1 wants to write to variable A. Process 2 wants to read variable A. Who lock?
4. Process 1 wants to read from variable A. Process 2 wants to read variable B. Who lock?
5. Process 1 wants to write to variable A. Process 2 wants to write variable A. Who lock?
6. Process 1…1000 all want to read from variable A. Process 1001 wants to write to variable A. Who must lock?
7. Process 1…1000 all want to write to variable A. Process 1001 wants to read from variable A. Who must lock?

SEGMENTING

Process A has base = 1000, limit =100.  
Process B has base = 300, limit =500.

Process C has base = 4000, limit =1000.

Process D has base = 5000, limit =100.

The total amount of ram is 6000.

1. Draw a picture
2. Where is VA=0 for process C?
3. Where is VA=1000 for process D?
4. Where is VA=400 for process B?
5. How much external fragmentation is there in this system? (Hint: It’ a judgement call but at least two different answers are reasonable.)

PAGING

1. Where is VA=1234 stored for process A?
2. Where is VA=12345 stored for process B?
3. Where is VA=0 stored for process C?

1. Which process owns PA = 1234?