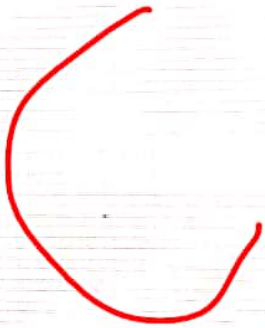
A solution to the external fragmentation problem is

Select one:

- a. Swap out
- b. MMU
- c. Paging
- d. Segmentation
- e. Swap in



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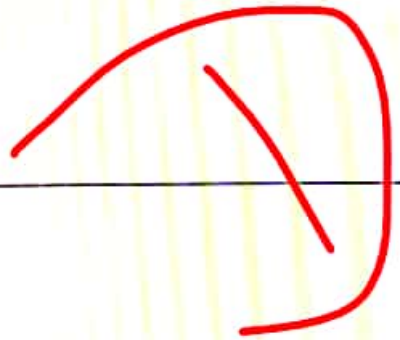
This is not a necessary condition to have a deadlock in a computer system.

Select one:

- a. Circular condition
- b. No preemption condition
- c. Mutual exclusion
- d. Bounded waiting condition
- e. Hold and wait condition



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The degree of Multiprogramming is controlled by,

Select one:

- a. CPU scheduler
- b. Long Term Scheduler
- c. Medium Term Scheduler
- d. Dispatcher
- e. None of the above

Moodle

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ion 5
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ag question

Disk requests come in the disk driver for cylinders 10, 22, 2, 40, 6, and 38, in that order. A seek takes 6 ms per cylinder moved. Assuming the arm is initially at cylinder 20, and moving toward larger cylinder number for a disk with 64 cylinders, how much seek time is needed for FIFO algorithm.

Select one:

- a. 744ms
- b. 624ms
- c. 696ms
- d. 348ms
- e. 124ms

B

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rked out of 1.0
Flag question

Disk requests come in the disk driver for cylinders 10, 22, 2, 40, 6, and 38, in that order. A seek takes 6 ms per cylinder moved. Assuming the arm is initially at cylinder 20, and moving toward larger cylinder number for a disk with 64 cylinders, how much seek time is needed for SSTF algorithm.

Select one:

- a. 336ms
- b. 624ms
- c. 348ms
- d. 928ms
- e. 696ms

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Question 25
Not yet answered
Marked out of 1.0
Flag question

Consider the following snapshot of a system:

Process	Allocation	Maximum Needs	Available
A	4	6	1
B	2	5	
C	2	3	
D	1	5	

Answer the following questions using the banker's algorithm:

Find the safe sequence

Select one:

- a. A, C, B, D
- b. B, A, C, D
- c. A, B, C, D
- d. C, B, A, D
- e. C, D, B, A

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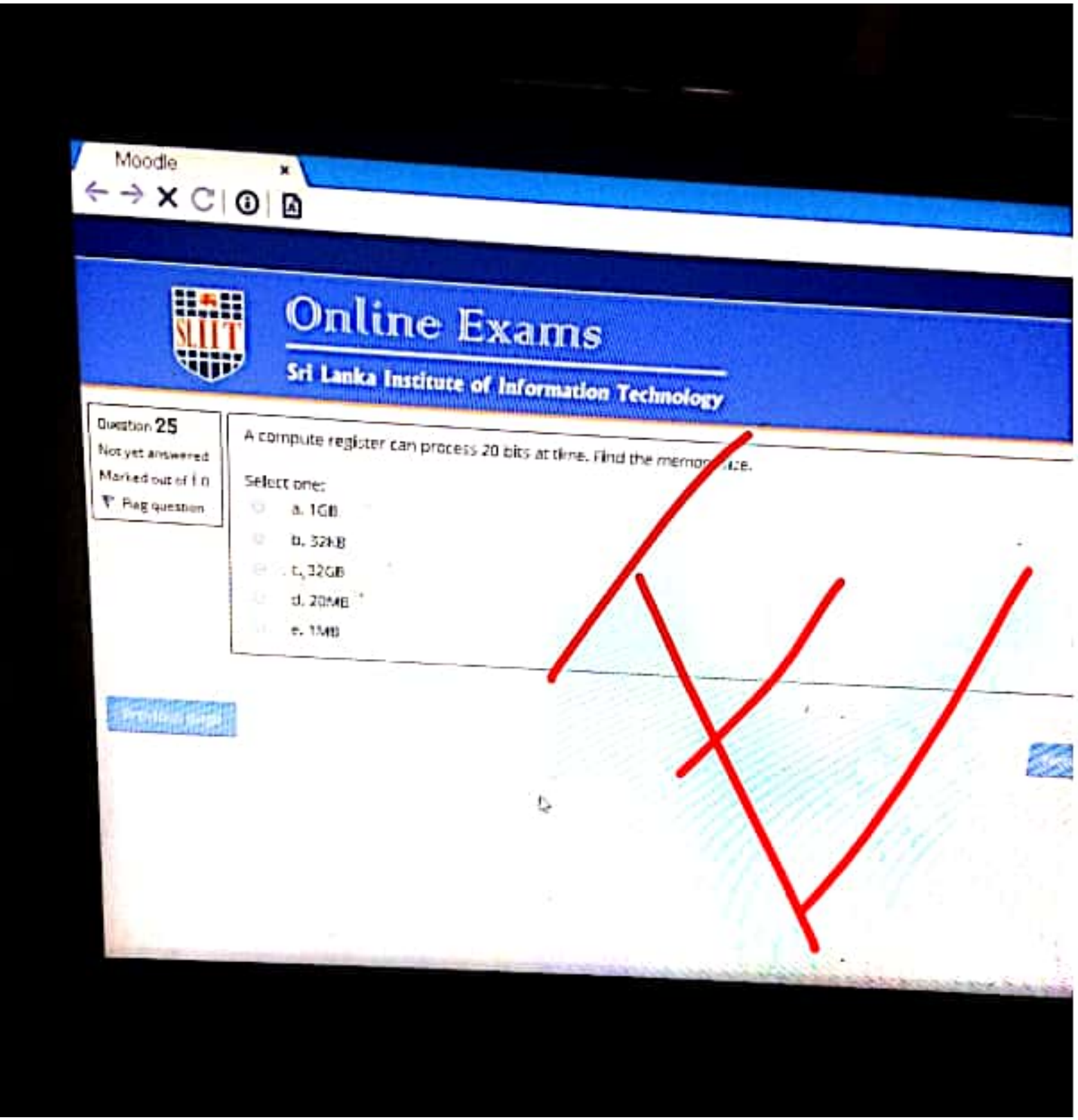
A solution to the external fragmentation problem is

Select one:

- a. Swap out
- b. MMU
- c. Paging
- d. Segmentation
- e. Swap in



Consider the following snapshot of a system:

Process	Allocation	Maximum Needs	Available
A	4	6	1
B	2	5	
C	2	3	
D	1	5	

Answer the following questions using the banker's algorithm:

Find the safe sequence

Select one:

- a. C, B, A, D
- b. C, D, B, A
- c. B, A, C, D
- d. A, C, B, D
- e. A, B, C, D

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Assume a system which uses 16- bit address space (0 to 65535) and a user program is allowed to access only addresses from 1
a page size of 1KB, what is the internal fragmentation size?

Select one:

a. 479 bytes

b. 512 bytes

c. 480 bytes

d. 478 bytes

e. 400 bytes

D

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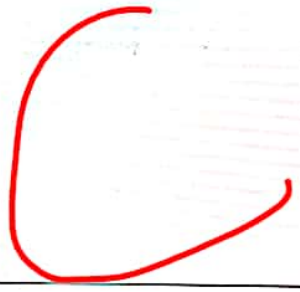
A computer word size is 25 bits find the memory size?

Select one:

- a. 32KB
- b. 5MB
- c. 32MB
- d. 5GB
- e. 32GB



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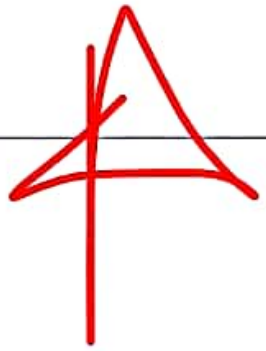
A computer has 4TB virtual memory and 512MB RAM. If the page size is 8KB. Find the number of bits for physical address.

Select one:

- a. 42 bits
- b. 10 bits
- c. 29 bits
- d. 13 bits
- e. 20 bits



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14
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question

Assume a system which uses 16- bit address space (0 to 65535) and a user program is allowed to access only addresses from 0 to 20000. Given a page size of 1KB. what is the internal fragmentation size?

Select one:

- a. 478 bytes
- b. 479 bytes
- c. 512 bytes
- d. 400 bytes
- e. 480 bytes

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Find the storage device which uses the laser beam to store the data?

Select one:

- a. Hard disk
- b. Cache
- c. RAM
- d. ROM
- e. CD

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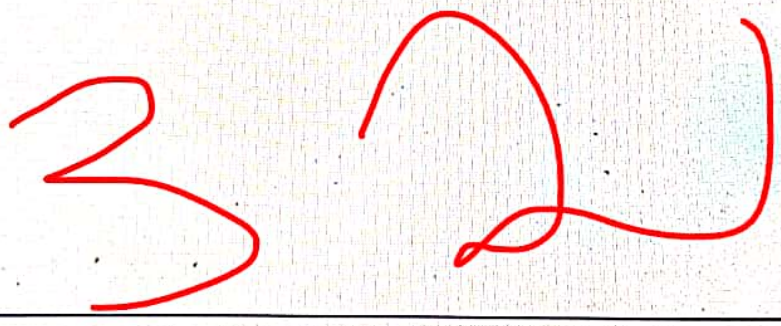
A computer has 2GB RAM find the number of bits for the memory address?

Select one:

- a. 31 bits
- b. 21 bits
- c. 41 bits
- d. 32 bits
- e. 20 bits



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A computer RAM speed is 200ns and TLB (Associate register) speed is 20ns. If the hit ratio is 90% find effective memory access time.

Select one:

- a. 240ns
- b. 420ns
- c. 198ns
- d. 320ns
- e. 440ns

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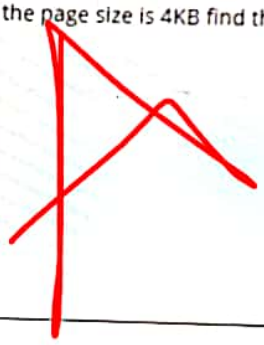
A virtual memory address has 40 bits and physical memory has 20 bits. If the page size is 4KB find the size of the physical memory.

Select one:

- a. 1MB
- b. 1TB
- c. 2MB
- d. 4TB
- e. 1GB



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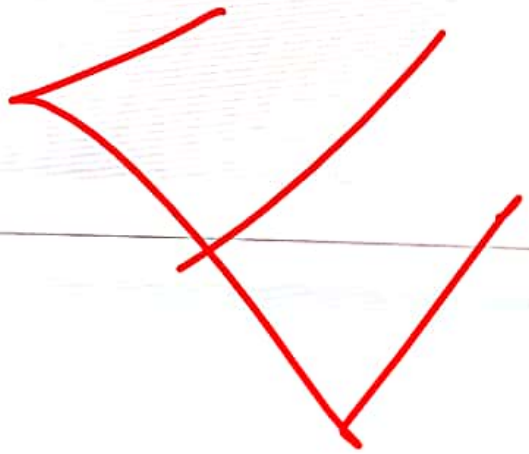
A type of semaphore which is not using a loop to check whether it is available or not called as

Select one:

- a. Mutex
- b. Monitor
- c. Spinlock
- d. Pipe
- e. Block and wake up



The faster memory in the computer system?

Select one:

- a. RAM
- b. Register
- c. Cache
- d. ROM
- e. Hard Disk

If a computer memory address has 20 bits find the memory size?

Select one:

- a. 1GB
- b. 1KB
- c. 1MB
- d. 2MB
- e. 2GB

ge

What will be the output in Line A?

```
#include <sys/types.h>
#include <stdio.h>
#include <unistd.h>
int value = 100;
int main()
{
pid_t pid;
pid = fork();
if (pid == 0) {
value = value + 15;
}
else if (pid > 0) {
value = value -15;
printf("PARENT: value= %d \n", value); //Line A
wait (NULL);
}
}
```

Select one:

- a. PARENT: value= 100
- b. PARENT: value= 115
- c. None of the given
- d. PARENT: value= 85
- e. PARENT: 102

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If the semaphore is implemented using the block and wake up technique, if there are two processes waiting for the semaphore in the waiting queue. What is the value of the semaphore at this time?

Select one:

- a. 1
- b. 0
- c. -2
- d. 2
- e. -1

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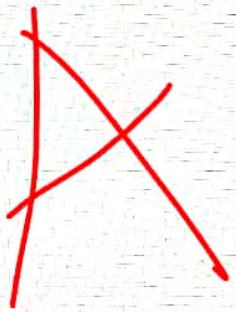
Which is a method of implementing the large page table in memory management?

Select one:

- a. Memory Map page table
- b. Swap out page Table
- c. Segmented Page table
- d. Swap in page Table
- e. Inverted page table



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Disk requests come in the disk driver for cylinders 10, 22, 2, 40, 6, and 38, in that order. A seek takes 6 ms per cylinder moved. Assuming the arm is initially at cylinder 20, and moving toward larger cylinder number for a disk with 64 cylinders, how much seek time is needed for C-SCAN algorithm.

Select one:

- a. 624ms
- b. 348ms
- c. 928ms
- d. 58ms
- e. 696ms

B

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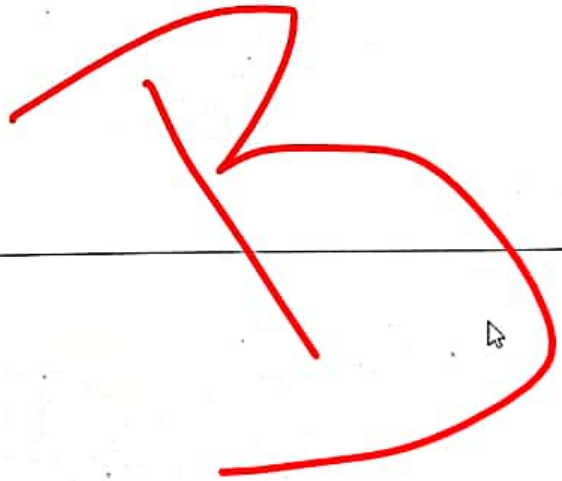
Question 33
Not yet answered
Marked out of 1.0
Flag question

Consider the following statements to write the answers:

A. If a graph contains a cycle then the system is may be in a deadlock.
B. Bakery algorithm is used to solve the deadlock problem for *n* processes.
C. Deadlock avoiding algorithms are **not** implemented in modern operating systems.

Select one:

- a. All are correct
- b. Only A and C are correct.
- c. Only A is correct
- d. Only B and C are correct.
- e. Only A and B are correct.



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. **Consider the following snapshot of a system:**

Process	Allocation	Maximum Needs	Available
A	4	6	1
B	2	5	
C	2	3	
D	1	5	

Answer the following questions using the banker's algorithm:

Find the safe sequence

Select one:

- a. C, A, B, D
- b. A, B, C, D
- c. B, A, C, D
- d. A, C, B, D
- e. C, D, B, A

Assume a system which uses 16- bit address space (0 to 65535) and a user program is allowed to access only addresses from 0 to 20000. Given a page size of 1KB. How many pages are there in the system?

Select one:

- a. 32 pages
- b. 16 pages
- c. 256 pages
- d. 128 pages
- e. 64 pages

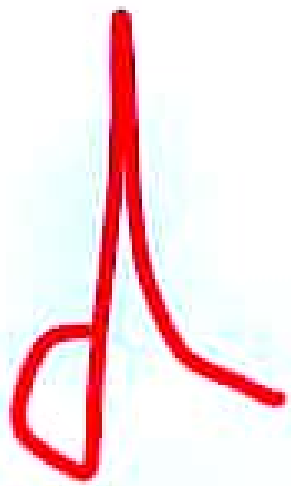
What is the output of Line B?

```
int value = 5;

int main ()
{
    pid = fork();

    if (pid == 0) {
        value = value + 15;
    }
    else if (pid > 0) {
        wait (NULL); // Line A
        printf ("Parent: value = %d \n", value); // Line B
    }

    return (0);
}
```



Select one:

a. Parent: value = 0

b. Parent: value = 15

c. None of the given

d. Parent: value = 5

e. Parent: value = 20

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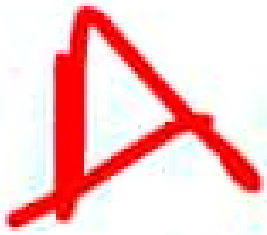
Which is a method of implementing the large page table in memory management?

Select one:

- a. Memory Map page table
- b. Inverted page table
- c. Swap out page Table
- d. Swap in page Table
- e. Segmented Page table



How many child processes are created when the program is executed?

Assume variables have been properly defined, and/or initialized and there is no syntax error

```
int main ( ) {
   fork ();
   fork ();
}
```

Select one:

- a. 16
- b. 3
- c. 8
- d. 7
- e. 15