

Quiz # 3

Solution:

Semaphore A,B,C

A=0,B=0,C=1

int C1,C2=0

Function 1	Function 2	Function 3
<pre>void function1() {wait(A) cout<<"a"; signal(B) }</pre>	<pre>void function2() {wait(B) C2++ cout<<"b"; if(C2%2==0) signal(C) else signal(B) }</pre>	<pre>void function3() { wait(C) C1++ cout<<"c"; if(C1%2==0) signal(A) else signal(C) }</pre>

Quiz # 4

32 bit logical address = 2^{32}

4KB page size = 2^{12}

4 bytes page table entry

Total number of pages = $2^{32}/2^{12} = 2^{20} = 1\text{M}$

Total number of bits needed for page number = 20bits

Now we have 1M pages and hence 1M page table entries and each entry size is 4bytes
so

Size of the page table is = $1\text{M} * 4\text{bytes} = 4\text{MB}$