Virtual University	**Assignment No. 04 Solution** **SEMESTER SPRING 2012** **CS604- Operating System**	**Total Marks: 20**

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Question 1:

Process P4 could use the four available resources and finish its execution. This would release five resources which could be taken by P3. This would produce eight resources which would enable P5 to finish, s the state is safe.

<P4, P3, P5>

Question 2:

```
 monitor class Account {
 private int balance = 0
 invariant balance >= 0

 public method boolean withdraw(int amount)
    precondition amount >= 0
 {
   if balance < amount then return false
   else { balance = balance - amount ; return true }
 }

 public method deposit(int amount)
    precondition amount >= 0
 {
   balance = balance + amount
 }
}
```