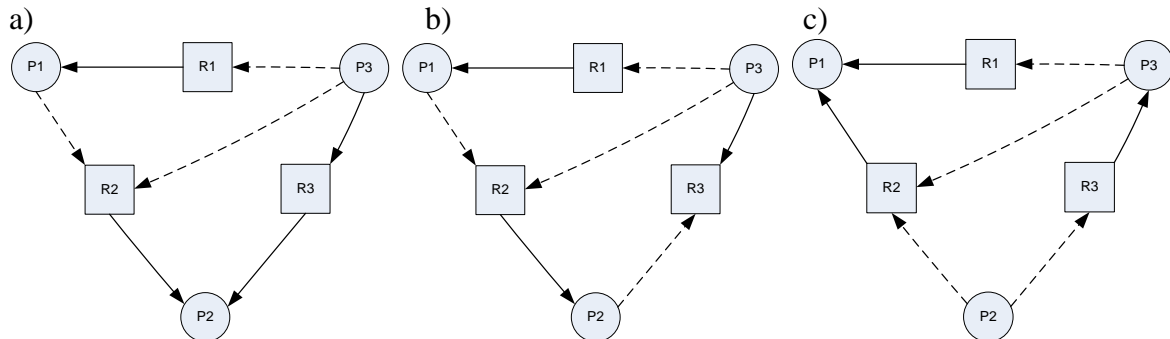


# Rešenja drugog kolokvijuma iz Operativnih sistema 2 Novembar 2011.

## 1. (10 poena)



## 2. (10 poena)

```

unsigned int getVictimPage (PCB* pcb) {
    static const unsigned long mask = ~(~0UL>>1); // 100...0b
    if (pcb==0) return -1; // Exception!
    while (pcb->pmt[pcb->clockHand] & mask) {
        pcb->pmt[pcb->clockHand] &= ~mask;
        pcb->clockHand = pcb->pagefifo[pcb->clockHand];
    }
    unsigned int victim = pcb->clockHand;
    pcb->clockHand = pcb->pagefifo[pcb->clockHand];
    return victim;
}

```

## 3. (10 poena)

```

X* Cache::alloc() {
    Slab* s=this->headSlab;
    for (; s!=0; s=s->nextSlab) // Find a slab with a free slot
        if (s->freeSlot) break;
    if (s==0) // No free slot. Allocate a new slab:
        s = new Slab(this);
    if (s==0 || s->freeSlot==0) return 0; // Exception: no free memory
    X* ret = s->freeSlot;
    s->freeSlot=*(X**)s->freeSlot;
    return ret;
}

```