

Treći kolokvijum iz Operativnih sistema 1

Jun 2013.

1. (10 poena)

```
Byte* getDiskBlock (BlkNo blk) {
    // Find the requested block in the cache and return it if present:
    int hash = blk%CACHESIZE;
    if (diskCacheMap[hash]==blk) return diskCache[hash];
    // The block is not in the cache.
    // If there is a block to evict, write it to the disk:
    if (diskCacheMap[hash]!=0)
        diskWrite(diskCacheMap[hash],diskCache[hash]);
    // Load the requested block:
    diskCacheMap[hash] = blk;
    diskRead(blk,diskCache[hash]);
    return diskCache[hash];
}
```

2. (10 poena) Na standardni izlaz ispisuje sadržaj tekućeg direktorijuma, tačnije, nazive ulaza u tekućem direktorijumu (po jedan u redu).

3. (10 poena)

```
int fread (FCB* f, Byte* buf, int n) {
    if (f==0) return 0;
    if (f->cur+n>f->size) n = f->size - f->cur;
    int read = 0; // Number of bytes read
    while (n>0) {
        BlkNo blkNo = f->cur/BLKSIZE;
        int byte = f->cur%BLKSIZE;
        Byte* block = readFileBlock(f,blkNo);
        if (block==0) return read; // Exception
        while (byte<BLKSIZE && n>0) {
            buf[read++]=block[byte++];
            n--; f->cur++;
        }
    }
    return read;
}
```