

# Grading for Programming Assignment 1

February 7, 2007

## **Part 1 (60%)**

### **Init \_disk (10%)**

Create the file 5%

Initialize global variable, etc. 5%

### **Read \_blocks (25%)**

Read data correctly 10%

Simulate probability of failure  $p$  5%

Sleep for  $L$  microseconds 5%

Check for proper range of `start_address` and `nblocks` 5%

### **Write \_blocks (25%)**

Write data correctly 10%

Simulate probability of failure  $p$  5%

Sleep for  $L$  microseconds 5%

Check for proper range of `start_address` and `nblocks` 5%

## **Part 2 (40%)**

### **Init \_cache (10%)**

Allocate memory for cache 5%

Initialize cache data structure 5%

### **Flush\_cache (5%)**

Write dirty data back to disk and reset dirty bit 5%

### **LRU Cache (25%)**

Read\_blocks uses cache (5%)

Write\_blocks uses cache (5%)

Dirty blocks are written back to disk when replaced (5%)

Items moved to head of cache when accessed (10%)