COMP354 – Operating Systems  
Spring 2012  
Project #4 – Grading Rubric  
Writing Files + Improved Shell

### / 30 Required Functionality

**compileOS** script additions work correctly  
Y N compileOS produces bootable OS image.  

**writeSector** works correctly  
Y N writes data into sector  
Y N returns 1  

**deleteFile** works correctly  
Y N correctly frees all sectors in disk map.  
Y N correctly nulls first character of filename  
Y N returns 1 if successful  
Y N returns -1 if file is not found  
Y N interrupt 0x07 for deleting file works correctly  

**writeFile** works correctly  
Y N writes 1 sector file correctly.  
Y N writes 2 sector file correctly.  
Y N reuses directory entry correctly (e.g. ends used sectors with 0)  
Y N correctly allocates sectors from disk map  
Y N writing existing file replaces file  
Y N return -1 if disk directory is full  
Y N return -2 if disk map is full  
Y N interrupt 0x08 for writing a file works correctly  

### / 30 Improvements

**User Library augmentation**  
Y N function for deleting a file  
Y N function for writing a file to disk

**Shell improvements**  
Y N `delete <file>` command works  
Y N `copy <src> <dest>` command works  
Y N `dir` command works

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**Editor**  
Y N Editor runs from command line.  
Y N Editor creates and saves new text file.  
Y N Editor replaces existing text file.

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**Coding Style**  
Y N Uses *struct*’s appropriately for searching disk directory.  
Y N Uses reasonable functional decomposition.  
Y N e.g. String comparisons  
Y N e.g. Finding directory entries

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**Documentation**  
Y N kernel.c and other files are well formatted and adequately documented.

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**Bonus**  

**Symbolic Links**  
Y N interrupt 0x0A creates a symbolic link  
Y N returns 1 if the link is created  
Y N returns -1 if the link cannot be found  
Y N returns -2 if the disk directory is full  
Y N Shell supports `symlink <src> <dest>` command  
Y N `type/copy` commands work with symbolic links  
Y N `delete command` removes link not file  
Y N `delete command` leaves dead link if file deleted  
Y N `type/copy` report file not found if dead link is typed/copied  
Y N `dead links` come back to life if new file is created

**Command History**  
Y N Up/down arrow display previous commands  
Y N Enter can be used to execute past command

**Shell Scripting**  
Y N Shell executes scripts  
Y N Shell scripts must start with #!

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**Total**  
Y N