# Systems Programming – Testing

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## Test Cases

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| Test Number | Purpose of Test |
| 1 | Check if the MAN page shows the correct expected output when viewing the manual page. This is required to allow users to get an understanding of the utility. |
| 2 | Check if directory listing works as intended, this is needed so users can easily and adequately get to know what files are inside the trashcan. |
| 3 | Check that users can move files to the trash can, this is needed because it allows files to be recovered after deletion. |
| 4 | Recover file from trash can, this is needed for when the user accidently deletes a file and needs to recover it. |
| 5 | Permanently delete a file from the trash can |
| 6 | Display the total file size of the trash can |
| 7 | Display a warning when the trashcan exceeds 1KB. |
| 8 | Start the trash can monitor |
| 9 | The monitor is killed by the script |

## Testing Data

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| Systems Programming Coursework 1, Trimester A | | | |
| Testing Chart | | | |
| Test Number | Command | Expected Result | Actual Result |
| 1. | groff -man -Tascii safeDel-manual.1 | The MAN page is rendered and displayed | The MAN page is rendered correctly |
| 2.1 | ./safeDel.sh -l | A list of files inside the trash can directory is show with their names and file types. | The files are displayed correctly with their correct file sizes. |
| 2.2 | ./safeDel > Option: list (1) | A list of files inside the trash can directory is show with their names and file types. | As seen above the list is shown correctly. |
| 3.1 | ./safeDel/sh [file …]  ./safeDel.sh temporary.file temporary.file2 | The file(s) are deleted | Files provided in the arguments are deleted successfully. |
| 3.2 | ./safeDel.sh -s | Interactively select a file to send to the trashCan, A file browser will open where you can navigate directories and then select the file. | The file browser is rendered, and directory navigation works. Selecting the file will yield the file’s being sent to the trash can. |
| 4.1 | ./safeDel -r testing.file | The file is recovered from the trashCan back to the current directory | Feature works as intended. |
| 4.2 | ./safeDel > Option: recover (2) | A recovery menu is shown then the file is recovered,  You should not be-able to navigate the directory because the focus is on the trashCan. | The menu is displayed and any selected file is recovered. You are unable to navigate the directories and are confined to the trash can.  The file is recovered. |
| 5 | ./safeDel > Option: delete (3)  Or  ./safeDel -d  Both of these invoke the same function | A deletion menu is shown then the file is deleted,  You should not be-able to navigate the directory because the focus is on the trashCan. | The menu is displayed, and any selected file is deleted. You are unable to navigate the directories and are confined to the trash can.  The file is deleted. |
| 6.1 | ./safeDel -t  Or  ./safeDel > Option: total (4) | Displays the total file size of the trash can in bytes | The trash can contents are displayed in bytes |
| 7 | ./safeDel -t | A warning is shown when going over the 1KB limit. | The warning about the trash can contents size is displayed. |
| 8.1 | ./safeDel > Option: watch (5)  Or  ./safeDel -m | The monitor is opened in a new terminal window | A new terminal window is opened with the monitor. |
| 8.2 | ./safeDel -m  + File deleted | The the monitor shows the deleted files | The monitor displays any delete files. |
| 8.3 | ./safeDel -m  + File added to recycling bin | The monitor shows the added file | The monitor displays and added files |
| 8.3 | ./safeDel -m  + File modified inside the recycling bin | Displays any changed files inside the recycling bin | The monitor displays changed files |
| 8.4 | ./safeDel -m  + File modified inside the recycling bin  + File deleted form inside the recycling bin | Displays all changes inside the recycling bin folder | The monitor displays the changes |
| 9 | ./safeDel -k  Or  ./safeDel  > Option: watch (6) | Kill the monitor (and its .pid file is deleted) | The monitor is closed and the .pid file is deleted. |