Question #1
Write a shell script program called ***myrm*** that imitates the Linux *rm* command. However, *myrm* will not delete the file, instead it performs the following tasks:

- Allow users to <u>relocate</u> the file to directory $HOME/WasteBasket. The following example will relocate *file1* into the *$HOME/WasteBasket* directory;
  myrm file1

  The program should display an error if no file name is entered. Example
  myrm
  Filename not entered. Usage: myrm fileName

- Directory *$HOME/WasteBasket* should <u>be created automatically by your program at the very first execution of your program.</u>
- Make sure the existence of the file name to be <u>relocated</u> is checked first before the move of the file takes place.
- If the file to be relocated into the *$HOME/WasteBasket* is already in the directory, save the file using random number. Example: mv file1 file1.$RANDOM

Procedure to test your shell script
1. Simply type myrm. Did the system execute your myrm command? If not, check your Linux PATH. If the script runs, did it give you the message "Filename not entered. Usage: myrm fileName".
2. If directory WasteBasket already exists, remove it. Now try to delete an existing file. The WasteBasket should automatically create it again. The WasteBasket directory should always be created in $HOME/WasteBasket.
3. Check the WasteBasket directory and make sure the file you have erased is in the WasteBasket directory.
4. Try to delete a non-existing file. Did it work?
5. Try to delete an existing file. Check the WasteBasket directory. Did it work?
6. cd to directory /tmp. Now create a junk file in /tmp directory. Try to delete your junk file you have just created.
7. Check the $HOME/ WasteBasket. Does the file exist? Or is the WasteBasket directory in /tmp? (WasteBasket directory should always be in your $HOME/WasteBasket).
8. Try to remove a file that you have no permission to erase (try file /etc/motd).
9. Did it work? (it should not because you have no permission).