Infrastructure Engineering Assignment

(For Linux OS)

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Problem description:

Program in C++(For Linux OS)

- To get the information of top ten large(size) files existing in the whole system/in the specific directory.
- To sort the files from the source directory and move them to folders according to their extensions into the destination directory.

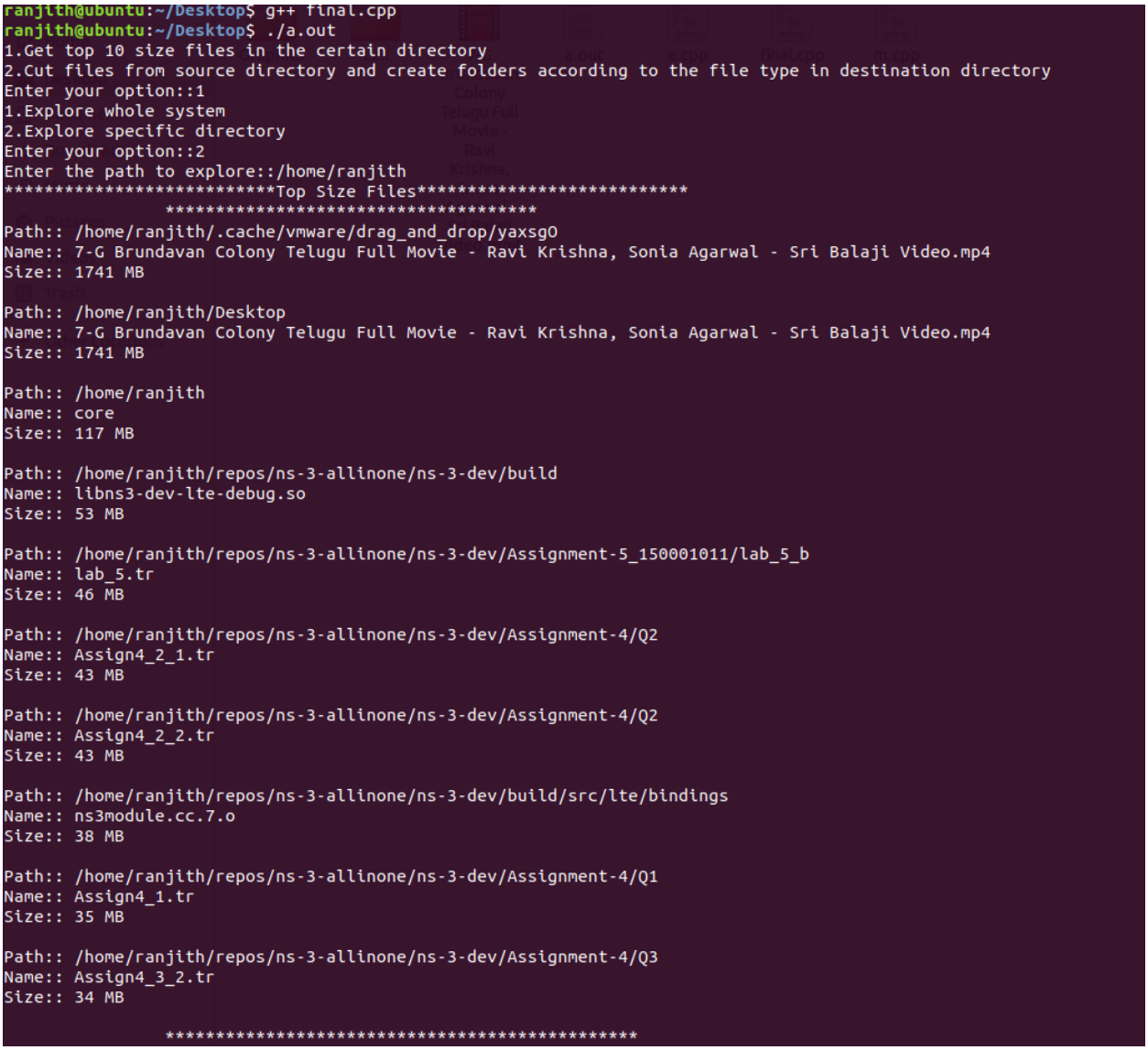
Methods description:

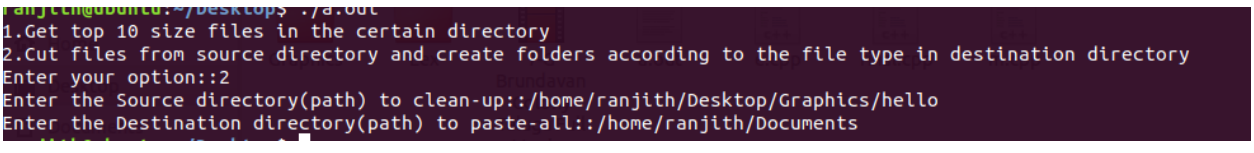
Methods Used:

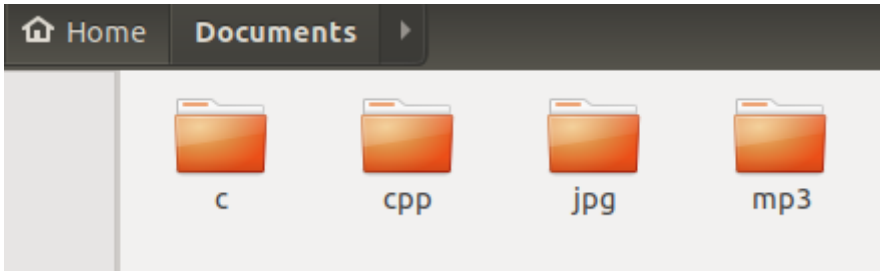
- explore_dir(char *name)
  - This method takes path to directory as input and starts exploring the directory.With the help of this method, we can get the information of files existing in that directory and its sub-directories.
- struct node* insert(const char *route,char *name,off_t size)
- struct node* enter(const char *route,char *name,off_t size)
- struct node* createNode(const char *route,char *name,off_t size)
  - The above three methods are used to maintain the information of top ten large files in the linked list having data members path,name,size of the file.
- off_t file_size(const char* path)
  - This method takes path to the file as input and returns file size in bytes.
- move_file(char *path)
- copy_cut_file(char* sou,char* des)
  - The above two methods are used to create the directory at the destination folder and paste files into them by copying from source respectively.

- print_file_info(struct node* info)
  - This method prints out the information of top ten size files.

Input/Output terminal images:







Here we can see that files are stored in the folders according to their extensions in the destination directory.

Conclusion:

The program was written only by taking Linux OS into consideration due to time constraints. In future (if permits), further program can be updated to run on Windows OS also.