**OS Unit 5 – Assignment**

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**Question :**

Write a C program to truncate the files in a directory created after a certain date and

half it's original size.

Inputs :

1. Directory path

2. Date

3. Size

**Source code :**

#define \_POSIX\_SOURCE

#include <dirent.h>

#include <errno.h>

#include <sys/types.h>

#include <stdio.h>

#include <time.h>

#include <sys/stat.h>

#include <string.h>

#include <stdlib.h>

#include <unistd.h>

int truncate(const char\* path, off\_t length);

int main(int argc, char\* argv[])

{

DIR\* dir;

struct dirent\* entry;

if ((dir = opendir(argv[1])) == NULL) perror("\nopendir() error");

else

{

printf("\ndirectory %s on : %s/%s/%s contained the following files:", argv[1], argv[2], argv[3], argv[4]);

while ((entry = readdir(dir)) != NULL)

{

char\* t = (char\*)calloc(100, sizeof(char));

struct stat b;

if (!stat(entry->d\_name, &b))

{

strftime(t, 100, "%d/%m/%Y %H:%M:%S", localtime(&b.st\_mtime));

int day = atoi(strtok(t, "/"));

int month = atoi(strtok(NULL, "/"));

int year = atoi(strtok(NULL, " "));

int \_day = atoi(argv[2]);

int \_month = atoi(argv[3]);

int \_year = atoi(argv[4]);

if (\_year <= year && \_month <= month && \_day <= day)

{

printf("\nfileName : \"%s\" \n last modified at : %s", entry->d\_name, t);

char path[100];

strcpy(path, argv[1]);

strcat(path, "/");

strcat(path, entry->d\_name);

int length = b.st\_size;

truncate(path, length / 2);

}

}

else printf("error\n");

closedir(dir);

}

printf("\n");

}

return 0;

}

**Output :**

