**Batch: C2-1 Roll No.: 16010122104**

**Experiment / assignment / tutorial No.**

**Grade: AA / AB / BB / BC / CC / CD /DD**

**Signature of the Staff In-charge with date**

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| --- |
| **TITLE:**  File handling in C |

**AIM:** Write a C program to copy the contents of one text file to another

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**Expected OUTCOME of Experiment:**

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**Books/ Journals/ Websites referred:**

1. Programming in C, second edition, Pradeep Dey and Manas Ghosh, Oxford University Press.
2. Programming in ANSI C, fifth edition, E Balagurusamy, Tata McGraw Hill.
3. Introduction to programming and problem solving, G. Michael Schneider ,Wiley India edition.

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**Theory:**

**Problem Definition:**

**Write a C program to**

1. Accept 5 students name and roll number from user
2. Create a new file having name “info.txt”
3. Copy students information collected in step 1 in file created in step 2 “info.txt”
4. Create one more new file having name “backup.txt”
5. Copy contain of file “info.txt” into “backup.txt”

**Implementation details:**

#include <stdio.h>

#include <stdlib.h>

struct student {

char name[50];

int roll\_number;

};

int main()

{

struct student s[5];

FILE \*fp, \*fp2;

// Accept 5 students name and roll number from user

for (int i = 0; i < 5; i++) {

printf("Enter name of student %d: ", i + 1);

scanf("%s", s[i].name);

printf("Enter roll number of student %d: ", i + 1);

scanf("%d", &s[i].roll\_number);

}

// Create a new file having name “info.txt”

fp = fopen("info.txt", "w");

// Copy students information collected in step 1 in file created in step 2 “info.txt”

for (int i = 0; i < 5; i++) {

fprintf(fp, "Name: %s\nRoll Number: %d\n", s[i].name, s[i].roll\_number);

}

fclose(fp);

// Create one more new file having name “backup.txt”

fp2 = fopen("backup.txt", "w");

// Copy contain of file “info.txt” into “backup.txt”

fp = fopen("info.txt", "r");

char c;

while((c = fgetc(fp)) != EOF) {

fputc(c, fp2);

}

fclose(fp);

fclose(fp2);

return 0;

}

**Output:**

Text

Description automatically generated

**Conclusion:**

Successfully created a program to copy the contents of one file to another with file name info.txt.

**Post Lab Descriptive Questions**

1. Write a program to append the contents of one file at the end of another.

**#include <stdio.h>**

**#include <stdlib.h>**

**int main()**

**{**

**FILE \*fsring1, \*fsring2, \*ftemp;**

**char ch, file1[20], file2[20], file3[20];**

**printf("Enter name of first file ");**

**gets(file1);**

**printf("Enter name of second file ");**

**gets(file2);**

**printf("Enter name to store merged file ");**

**gets(file3);**

**fsring1 = fopen(file1, "r");**

**fsring2 = fopen(file2, "r");**

**if (fsring1 == NULL || fsring2 == NULL)**

**{**

**perror("Error has occured");**

**printf("Press any key to exit...\n");**

**exit(EXIT\_FAILURE);**

**}**

**ftemp = fopen(file3, "w");**

**if (ftemp == NULL)**

**{**

**perror("Error has occures");**

**printf("Press any key to exit...\n");**

**exit(EXIT\_FAILURE);**

**}**

**while ((ch = fgetc(fsring1)) != EOF)**

**fputc(ch, ftemp);**

**while ((ch = fgetc(fsring2) ) != EOF)**

**fputc(ch, ftemp);**

**printf("Two files merged %s successfully.\n", file3);**

**fclose(fsring1);**

**fclose(fsring2);**

**fclose(ftemp);**

**return 0;**

**}**

**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_ Signature of faculty in-charge**