**SSN COLLEGE OF ENGINEERING (Autonomous)**

**Affiliated to Anna University**

**DEPARTMENT OF CSE**

**UCS 1211 PROGRAMMING IN C LABORATORY**

**Assignment 7:File Handling in C**

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**CLASS : CSE-B (SEMESTER-2)**

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***1.Write a program which accepts two file names as command line arguments.file1 and file2.Copy the contents of file1 to file2 .If file1 already exits copy the contents to file2 otherwise display as no such file. If file2 already exists ,ask the user whether to overwrite the existing contents or to append the contends and do accordingly.***

**Program:**

#include<stdio.h>

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

{

FILE \*fp1;

fp1=fopen(argv[1],"r");

if(fp1==NULL)

{

printf("File does not exist");

return 0;

}

else

{

FILE \*fp2;

fp2=fopen(argv[2],"r");

if(fp2==NULL)

{

fclose(fp2);

fp2=fopen(argv[2],"w");

char c;

while(c=getc(fp1)!=EOF)

{

putc(c,fp2);

}

fclose(fp1);

fclose(fp2);

printf("Copied successfully");

return 0;

}

else

{

fclose(fp2);

int a;

printf("Press\n1.Overwrite\n2.Append\n");

scanf("%d",&a);

if(a==1)

{

fp2=fopen(argv[2],"w");

char c;

while(c=getc(fp1)!=EOF)

{

putc(c,fp2);

}

fclose(fp1);

fclose(fp2);

printf("Overwrite Completed");

return 0;

}

else if(a==2)

{

fp2=fopen(argv[2],"a");

char c;

while(c=getc(fp1)!=EOF)

{

putc(c,fp2);

}

fclose(fp1);

fclose(fp2);

printf("Appended Successfully");

return 0;

}

else

{

printf("Invalid Input");

}

}

}

}

***2. Write an interactive C program to maintain a list of names, address and telephone numbers. Store the information as records in a file and represent each record as a structure. Perform the following operations:***

1. ***Add a new record at the end of the file.***
2. ***Modify an existing record.***
3. ***Retrieve and display an entire record for a given name.***
4. ***List all names with their addresses and telephone numbers.***

**Program:**

#include<stdio.h>

#include<string.h>

int n=0;

struct phonebook

{

char name[30],address[100],phno[11];

}pb[100];

int main()

{

void addeof();

void modify();

void displaysel();

void displayall();

int search();

int s=1;

printf("Press\n1.Add a New Record at end of a file.\n2.Modify an existing record.\n3.Retrve and display an entire record for a given name.\n4.List all names with their addresses and telephone numbers.\n5.Exit\n");

scanf("%d",&s);

while(s!=5)

{

switch(s)

{

case 1:addeof();

break;

case 2:modify();

break;

case 3:displaysel();

break;

case 4:displayall();

break;

case 5:return 0;

default:printf("Enter a valid input:");

}

printf("Press\n1.Add a New Record at end of a file.\n2.Modify an existing record.\n3.Retrve and display an entire record for a given name.\n4.List all names with their addresses and telephone numbers.\n5.Exit\n");

scanf("%d",&s);

}

return 0;

}

void addeof()

{

char ch='y';

while(ch=='y' || ch=='Y')

{

n+=1;

FILE \*fp;

fp=fopen("Phonebook.txt","a");

printf("Enter Name:");

scanf("%s",pb[n-1].name);

fprintf(fp,"%s",pb[n-1].name);

fprintf(fp,"\t\t");

printf("Enter Address:");

scanf("%s",pb[n-1].address);

fprintf(fp,"%s",pb[n-1].address);

fprintf(fp,"\t\t");

printf("Enter telephone num:");

scanf("%s",pb[n-1].phno);

fprintf(fp,"%s",pb[n-1].phno);

fprintf(fp,"\n\n");

fclose(fp);

printf("Continue(y/n)?:");

scanf(" %c",&ch);

}

printf("List updated!\n");

}

void modify()

{

int x,y;

x=search();

if (x == -1)

{

return;

}

FILE \*fp;

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

printf("Press\n1.Edit Name\n2.Edit Address\n3.Edit Telephone number\n");

scanf("%d",&y);

if(y == 1)

{

printf("Enter Name:");

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

}

else if(y == 2)

{

printf("Enter Address:");

scanf("%s",pb[x].address);

}

else if(y==3)

{

printf("Enter telephone num:");

scanf("%s",pb[x].phno);

}

else

{

printf("Invalid Input");

}

printf("Modified Sucessfully!\n");

fclose(fp);

}

void displaysel()

{

int x;

x=search();

if (x == -1)

{

return;

}

FILE \*fp;

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

fscanf(fp,"%s\t%s\t%s\n",pb[x].name,pb[x].address,pb[x].phno);

printf("Name:%s\nAddress:%s\nTelephone Number:%s\n",pb[x].name,pb[x].address,pb[x].phno);

fclose(fp);

}

void displayall()

{

FILE \*fp;

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

for(int i=0;i<n;i++)

{

printf("Name:%s\nAddress:%s\nTelephone Number:%s\n",pb[i].name,pb[i].address,pb[i].phno);

}

fclose(fp);

}

int search()

{

FILE \*fp;

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

int x=0,y;

char srch[30];

printf("Enter the name of the person you want to search:");

scanf("%s",srch);

for(int i=0;i<n;i++)

{

if(strcmp(srch,pb[i].name) == 0)

{

y=i;

x=1;

}

}

fclose(fp);

if (x == 0)

{

printf("The given name is not found!\n");

y=-1;

}

return y;

}

**Output:**

cseb121@jtl-19:~$gcc a7\_2 -o a7\_2

cseb121@jtl-19:~$./a7\_2

Press

1.Add a New Record at end of a file.

2.Modify an existing record.

3.Retrve and display an entire record for a given name.

4.List all names with their addresses and telephone numbers.

5.Exit

1

Enter Name:Rahul

Enter Address:Nagercoil

Enter telephone num:8300942167

Continue(y/n)?:y

Enter Name:Mom

Enter Address:Kanyakumari

Enter telephone num:79427348273

Continue(y/n)?:y

Enter Name:Dad

Enter Address:Chennai

Enter telephone num:3754759347

Continue(y/n)?:y

Enter Name:Brother

Enter Address:Coimatore

Enter telephone num:73894753953

Continue(y/n)?:n

List updated!

Press

1.Add a New Record at end of a file.

2.Modify an existing record.

3.Retrve and display an entire record for a given name.

4.List all names with their addresses and telephone numbers.

5.Exit

2

Enter the name of the person you want to search:Brother

Press

1.Edit Name

2.Edit Address

3.Edit Telephone number

1

Enter Name:Bro

Modified Sucessfully!

Press

1.Add a New Record at end of a file.

2.Modify an existing record.

3.Retrve and display an entire record for a given name.

4.List all names with their addresses and telephone numbers.

5.Exit

3

Enter the name of the person you want to search:Dad

Name:Dad

Address:Chennai

Telephone Number:3754759347

Press

1.Add a New Record at end of a file.

2.Modify an existing record.

3.Retrve and display an entire record for a given name.

4.List all names with their addresses and telephone numbers.

5.Exit

4

Name:Rahul

Address:Nagercoil

Telephone Number:8300942167

Name:Mom

Address:Kanyakumari

Telephone Number:79427348273Dad

Name:Dad

Address:Chennai

Telephone Number:3754759347

Name:Bro

Address:Coimatore

Telephone Number:73894753953

Press

1.Add a New Record at end of a file.

2.Modify an existing record.

3.Retrve and display an entire record for a given name.

4.List all names with their addresses and telephone numbers.

5.Exit

***3.Modify 2 by using fread and fwrite functionsfor reading and writing.Perform th efollowing operations:***

1. ***Insert a new record in mth position.***
2. ***Delete a record based upon a given name.***
3. ***Display nth record.***