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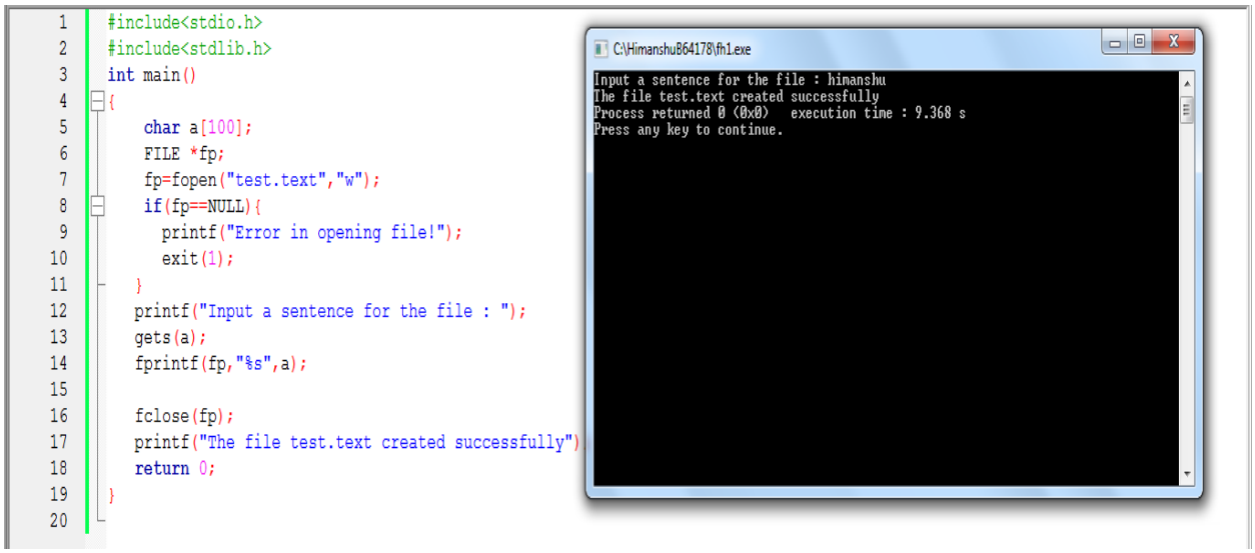
BATCH : B10

SOFTWARE DEVELOPMENT FUNDAMENTAL LAB-I(15B17CI171)
Assignment Sheet (WEEK-11 PHASE-2)
Lab A

1. *Write a program in C to create and store information in a text file.*
Sample input:
Input a sentence for the file : This is the content of the file test.txt.
Expected Output:
The file test.txt created successfully...!!

Solution:

```
#include<stdio.h>
#include<stdlib.h>
int main()
{
   char a[100];
   FILE *fp;
   fp=fopen("test.text","w");
   if(fp==NULL){
     printf("Error in opening file!");
     exit(1);
  }
  printf("Input a sentence for the file : ");
  gets(a);
  fprintf(fp,"%s",a);
  fclose(fp);
  printf("The file test.text created successfully");
  return 0;
}
```



```c
#include<stdio.h>
#include<stdlib.h>
int main()
{
    char a[100];
    FILE *fp;
    fp=fopen("test.text","w");
    if(fp==NULL){
      printf("Error in opening file!");
      exit(1);
   }
   printf("Input a sentence for the file : ");
   gets(a);
   fprintf(fp,"%s",a);

   fclose(fp);
   printf("The file test.text created successfully");
   return 0;
}
```

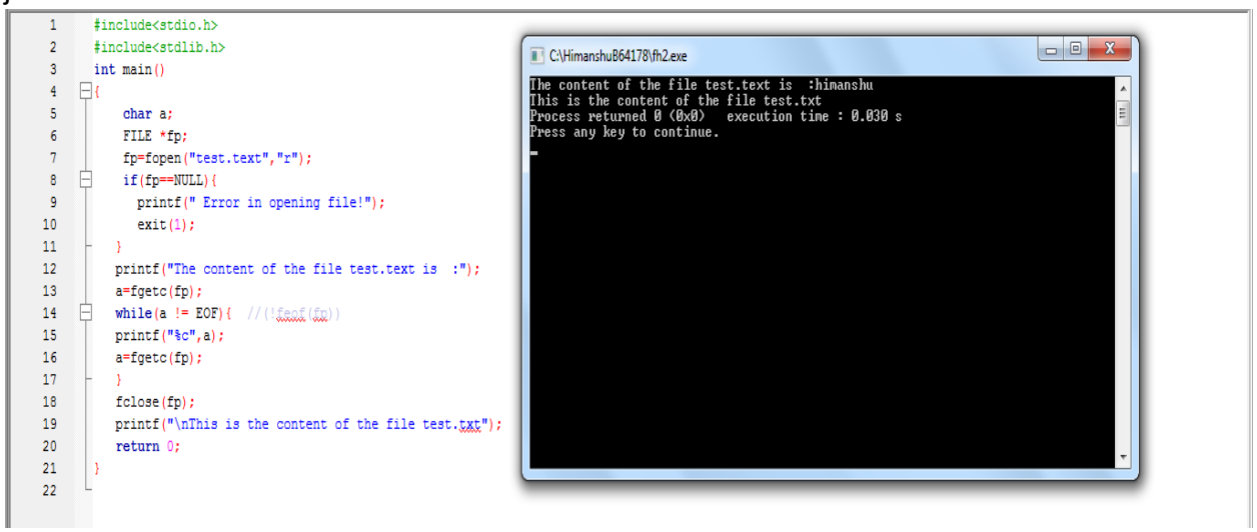
```
C:\Himanshu864178\fh1.exe
Input a sentence for the file : himanshu
The file test.text created successfully
Process returned 0 (0x0)   execution time : 9.368 s
Press any key to continue.
```

2. *Write a program in C to read an existing file.*
Test Data :
Input the file name to be opened : test.txt
Expected Output :
The content of the file test.txt is :
This is the content of the file test.txt.

Solution:

```c
#include<stdio.h>
#include<stdlib.h>
int main()
{
   char a;
   FILE *fp;
   fp=fopen("test.text","r");
   if(fp==NULL){
     printf(" Error in opening file!");
     exit(1);
  }
  printf("The content of the file test.text is  :");
  a=fgetc(fp);
  while(a != EOF){  //(!feof(fp))
  printf("%c",a);
```

```
  a=fgetc(fp);
  }
  fclose(fp);
  printf("\nThis is the content of the file test.txt");
  return 0;
}
```



```c
#include<stdio.h>
#include<stdlib.h>
int main()
{
    char a;
    FILE *fp;
    fp=fopen("test.text","r");
    if(fp==NULL){
      printf(" Error in opening file!");
      exit(1);
   }
   printf("The content of the file test.text is  :");
   a=fgetc(fp);
   while(a != EOF){  //(!feof(fp))
   printf("%c",a);
   a=fgetc(fp);
   }
   fclose(fp);
   printf("\nThis is the content of the file test.txt");
   return 0;
}
```

```
C:\HimanshuB64178\fh2.exe
The content of the file test.text is  :himanshu
This is the content of the file test.txt
Process returned 0 (0x0)   execution time : 0.030 s
Press any key to continue.
```

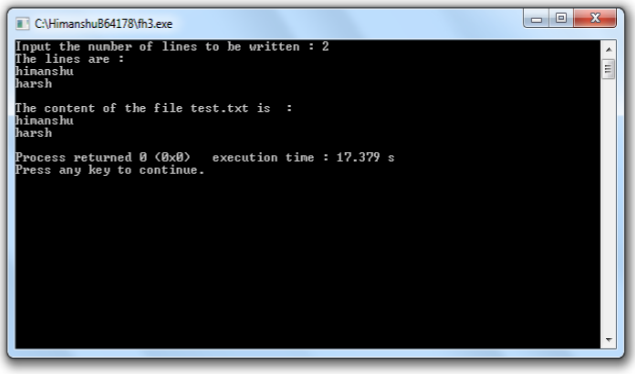
3. *Write a program in C to write multiple lines in a text file.*
Test Data :
Input the number of lines to be written : 4
:: The lines are ::
test line 1
test line 2
test line 3
test line 4
Expected Output :
The content of the file test.txt is :
test line 1
test line 2
test line 3
test line 4

Solution:

```
#include <stdio.h>
#include<stdlib.h>
int main ()
```

```
{
  char a[100],b;
  FILE *fp;
  fp=fopen("test.text","w");
  char fname[20]="test.txt";
  int n;
  printf("Input the number of lines to be written : ");
  scanf("%d", &n);
  printf("The lines are :\n");
  for(int i = 0; i < n+1; i++)
                {
                fgets(a, sizeof(a), stdin);
                fputs(a, fp);
                }
  fclose (fp);
  fp=fopen("test.text","r");
  printf("\nThe content of the file %s is  :",fname);
        b = fgetc(fp);
        while (b != EOF)
                {
                        printf ("%c", b);
                        b = fgetc(fp);
                }
    fclose (fp);
    return 0;
}
```

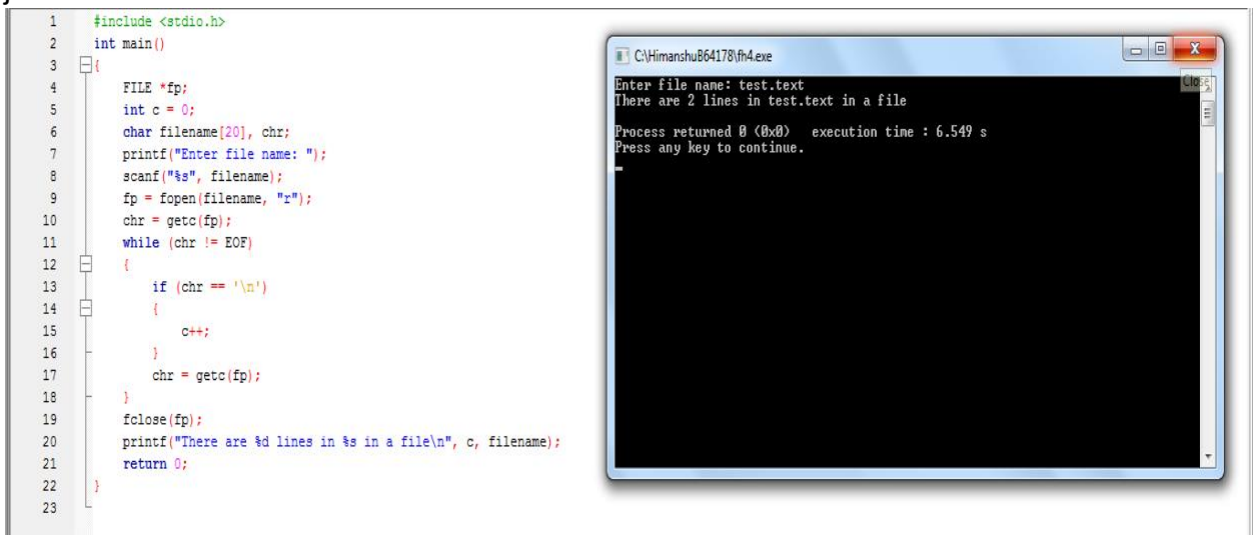
```
#include <stdio.h>
#include<stdlib.h>
int main ()
{
   char a[100],b;
   FILE *fp;
   fp=fopen("test.text","w");
   char fname[20]="test.txt";
   int n;
   printf("Input the number of lines to be written : ");
   scanf("%d", &n);
   printf("The lines are :\n");
   for(int i = 0; i < n+1; i++)
        {
        fgets(a, sizeof(a), stdin);
        fputs(a, fp);
        }
   fclose (fp);
   fp=fopen("test.text","r");
   printf("\nThe content of the file %s is  :",fname);
     b = fgetc(fp);
     while (b != EOF)
         {
             printf ("%c", b);
             b = fgetc(fp);
         }
    fclose (fp);
    return 0;
}
```



4. *Write a program in C to find the number of lines in a text file.*
Enter file name: abc.txt
There are 43 lines in the file

Solution:

```
#include <stdio.h>
int main()
{
   FILE *fp;
   int c = 0;
   char filename[20], chr;
   printf("Enter file name: ");
   scanf("%s", filename);
   fp = fopen(filename, "r");
   chr = getc(fp);
   while (chr != EOF)
   {
      if (chr == '\n')
      {
         c++;
      }
      chr = getc(fp);
   }
   fclose(fp);
   printf("There are %d lines in %s in a file\n", c, filename);
   return 0;
}
```



5. *Write a C Program to append the content of file at the end of another.*
Enter name of first file a.txt
Enter name of second file b.txt
Enter name to store merged file merge.txt
Two files merged merge.txt successfully.

Solution:

```
#include <stdio.h>
#include <stdlib.h>
int main()
{
   FILE *fp1, *fp2, *ft;
   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);
   fp1 = fopen(file1, "r");
   fp2 = fopen(file2, "r");
   if (fp1 == NULL || fp2 == NULL)
   {
      printf("Error in opening file!");
      exit(1);
   }
   ft = fopen(file3, "w");
   if (ft == NULL)
   {
      printf("Error in opening file!");
      exit(1);
   }
   while ((ch = fgetc(fp1)) != EOF){
      fputc(ch, ft);
   }
   while ((ch = fgetc(fp2) ) != EOF){
```

```
        fputc(ch, ft);
    }
    printf("Two files merged  %s successfully.", file3);
    fclose(fp1);
    fclose(fp2);
    fclose(ft);
return 0;
}
```

```c
#include <stdio.h>
#include <stdlib.h>
int main()
{
    FILE *fp1, *fp2, *ft;
    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);
    fp1 = fopen(file1, "r");
    fp2 = fopen(file2, "r");
    if (fp1 == NULL || fp2 == NULL)
    {
        printf("Error in opening file!");
        exit(1);
    }
    ft = fopen(file3, "w");
    if (ft == NULL)
    {
        printf("Error in opening file!");
        exit(1);
    }
    while ((ch = fgetc(fp1)) != EOF){
        fputc(ch, ft);
    }
    while ((ch = fgetc(fp2) ) != EOF){
        fputc(ch, ft);
    }
    printf("Two files merged  %s successfully.", file3);
    fclose(fp1);
    fclose(fp2);
    fclose(ft);
return 0;
}
```