

Programming Fundamentals Lab
Lab Assignment 12

Course Code: CL1002

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Question: 1

```
q2.c  q3.c  q1.c
1  #include<stdio.h>
2  #include<string.h>
3  #include<stdlib.h>
4
5  main(){
6      FILE *fp1,*fp2,*fp3;
7      char str[10],ch;
8
9      fp1= fopen("text1.txt", "w");
10     if(fp1==NULL)
11     {
12         printf("Error opening file\n");
13         exit(0);
14     }
15     printf("Enter Data to store in File 1: ");
16     fflush(stdin);
17     gets(str);
18     fputs(str, fp1);
19
20     fp2= fopen("text2.txt", "w");
21     if(fp2==NULL)
22     {
23         printf("Error opening file\n");
24         exit(0);
25     }
26     printf("Enter Data to store in File 2: ");
27     gets(str);
28     fputs(str, fp2);
29
30     fp3=fopen("text3.txt", "w");
31     if(fp3==NULL)
32     {
33         printf("Error opening file\n");
34         exit(0);
35     }
36
37     else{
38
39         while((ch=fgetc(fp1))!=EOF)
40         {
41             fputc(ch, fp3);
42         }
43         while((ch=fgetc(fp2))!=EOF)
44         {
45             fputc(ch,fp3);
46         }
47         rewind(fp3);
48         fclose(fp1);
49         fclose(fp2);
50         fclose(fp3);
51
52         printf("text1.txt & text2.txt have been merged successfully\n");
53
54     }
55 }
```

text1 - Notepad

File Edit View

syed

text2 - Notepad

File Edit View

shuja

```
C:\Users\Admin\Desktop\PF I  X  +  v
Enter Data to store in File 1: syed
Enter Data to store in File 2: shuja
text1.txt & text2.txt have been merged successfully

-----
Process exited after 8.96 seconds with return value 0
Press any key to continue . . .
```

Question: 2

```

q2.c  q3.c  q1.c
1  #include <stdio.h>
2  #include <string.h>
3  #include <stdlib.h>
4  int main()
5  {
6      FILE *fp1,*fp2; char str[25];
7      int i,j,freq[26]={0},count=0,ch;
8
9
10     fp1=fopen("text.txt","w");
11     printf("enter text: ");
12     gets(str);
13     fprintf(fp1,"%s",str);
14     fclose(fp1);
15
16     if(fp1==NULL)
17     {
18         printf("error.\n");exit(0);
19     }
20     else
21     {
22         fgets (str, 20, fp1);
23         printf("Text is: %s\n",str);
24         fclose(fp1);
25
26
27         for(i = 0; str[i] != '\0'; i++)
28         {
29             freq[str[i] - 'a']++;
30         }
31         else if(str[i] >= 'A' && str[i] <= 'Z')
32         {
33             freq[str[i] - 'A']++;
34         }
35     }
36
37     fp2=fopen("q2ii.txt","w");
38
39     for(i = 0; i < 26; i++)
40     {
41         if(freq[i] != 0)
42         {
43             fprintf(fp2,"Character '%c/%c' Occurs %d Times \n", i+'A',i+'a', freq[i]);
44         }
45     }
46
47     for(i=0;i<strlen(str);i++)
48     {
49         if(str[i]==' ')
50             continue;
51         else count++;
52     }
53     fprintf(fp2,"Total characters: %d",count);
54
55 }
56

```

q2ii - Notepad

File Edit View

```

Character 'A/a' Occurs 2 Times
Character 'E/e' Occurs 1 Times
Character 'H/h' Occurs 1 Times
Character 'I/i' Occurs 1 Times
Character 'J/j' Occurs 1 Times
Character 'M/m' Occurs 2 Times
Character 'N/n' Occurs 1 Times
Character 'S/s' Occurs 2 Times
Character 'U/u' Occurs 1 Times
Character 'Y/y' Occurs 1 Times
Total characters: 13

```

Question: 3

```
q2.c  q3.c  q1.c
1  #include<stdio.h>
2  #include<string.h>
3
4  struct stdnt{
5      char id[10], name[20],gender;
6      int quiz1,quiz2,mid,final,total;
7  }s[20];
8
9  int main(){
10     int n,i;
11     FILE *fp;
12     fp=fopen("Q3.txt","w+");
13
14     for(i=0;i<2;i++){
15         printf("Details of student %d:\n",i+1);
16         printf("Enter name of student: ");
17         fflush(stdin);
18         gets(s[i].name);
19         printf("ID: ");
20         gets(s[i].id);
21         printf("Gender: ");
22         scanf("%c",&s[i].gender);
23         printf("Quiz 1: ");
24         scanf("%d",&s[i].quiz1);
25         printf("Quiz 2: ");
26         scanf("%d",&s[i].quiz2);
27         printf("Mids: ");
28         scanf("%d",&s[i].mid);
29         printf("Final: ");
30         scanf("%d",&s[i].final);
31
32         s[i].total=s[i].final+s[i].quiz1+s[i].quiz2+s[i].mid;
33         fprintf(fp,"%s %s %c %d %d %d %d\n",s[i].name,s[i].id,s[i].gender,s[i].quiz1,s[i].quiz2,s[i].mid,s[i].final,s[i].total);
34     }
35     fclose(fp);
36
37 }
38
39
40 }
```

```
C:\Users\Admin\Desktop\PF L X + v
Details of student 1:
Enter name of student: shuja
ID: 22K-4456
Gender: M
Quiz 1: 3
Quiz 2: 3
Mids: 25
Final: 30
Details of student 2:
Enter name of student: maria
ID: 22K-5555
Gender: F
Quiz 1: 2
Quiz 2: 2
Mids: 20
Final: 30

-----
Process exited after 146.4 seconds with
Press any key to continue . . .
```

Q3 - Notepad

File	Edit	View
shuja 22K-4456 M 3 3 25 30 61		
maria 22K-5555 F 2 2 20 30 54		