

Lab Internal – File Structures.

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1CR18IS151

6TH SEMESTER – C SECTION.

Code:

```
#include <iostream>
#include <string.h>
#include <fstream>
#include <stdlib.h>

using namespace std;
fstream f1,f2,f3;

void createlists()
{
    int n,m;
    char name[20];
    f1.open("File 1.txt", ios::out);
    f2.open("File 2.txt", ios::out);
    if ((!f1) || (!f2) )
    {
        cout << "Unable to open the requested files!"
        exit(0);
    }

    cout << "Enter the umber of names in file 1: ";
    cin >> n;
    cout << "Enter the umber of names in file 2: ";
    cin >> m;
    int i;
    cout << "Enter the names in File 1: "<<endl;
    for (i=0;i<n;i++) {
        cin>> name;
        f1 << name;
        f1 << "\n";
    }
}
```

```

    cout << "Enter the names in file 2: " << endl;
    for(i = 0;i<m;i++)
    {
        cin >> name;
        f2 << name;
        f2 << "\n";
    }
    f1.close();
    f2.close();
}

void coseqmatch(){
    char list[50][20], list2[60][20];
    f1.open("File 1.txt", ios::in);
    f2.open("File 2.txt", ios::in);
    f3.open("File 3.txt", ios::out);
    if ((!f1) || (!f2) || (!f3)) {
        cout << "Unable to create files!";
        exit(0);
    }
    int n = 0,m = 0;
    cout << "Elements in List1 are: "<< endl;
    while(!f1.eof())
    {
        f1.getline(list1[n],20);
        cout << list1[n] << endl;
        n++;
    }

    cout << "Elements in List2 are: "<< endl;
    while(!f2.eof())
    {
        f2.getline(list2[n],20);
        cout << list2[n] << endl;
        m++;
    }

    int i,j,k;
    i = j = k = 0;
    cout << "Common Names in both the lists are:"<<endl;
    while (i < n-1 || j < m - 1)
    {
        if (strcmp(list1[i],list2[j]) == 0)
        {
            f3 << list1[i] << "\n";
            i++;
            j++;
            k++;
        }
    }
}

```

```

    }
    else if(strcmp(list1[i],list2[j] < 0))
        i++;
    else
        j++;
    }
    if (k == 0)
        cout<<"There are no common elements :(" << endl;

}

int main()
{
    createlists();
    coseqmatch();
}

```

Output:

```

sooraj@Asus-F-15:~/FS lab/Program 7$ ./a.out
Enter the number of names in File 1: 3
Enter the number of names in File 2: 3
Enter the names in File1:
Sooraj
Singh
Akshay
Enter the names in File2:
Sooraj
Singh
Veena
Elements in list 1:

Sooraj
Singh
Akshay

Elements in list 2:

Sooraj
Singh
Veena

Common names:

File 3 has Sooraj
File 3 has Singh

```

```
sooraj@Asus-F-15:~/FS lab/Program 7$ ./a.out
Enter the number of names in File 1: 2
Enter the number of names in File 2: 2
Enter the names in File1:
Sooraj
Singh
Enter the names in File2:
Anirudh
KP
Elements in list 1:

Sooraj
Singh

Elements in list 2:

Anirudh
KP

Common names:

There are no common elements.
```

→ FS Lab Internals.

Name → Sonu M. Singh.

Section → VI 'C'

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Program 7: Write a program to Read two names & the lists of
match the two lists using Consequential Match based on
a Single loop. Output the names common to both lists.

Code:

```
#include <iostream>
#include <string.h>
#include <fstream.h>
# include include <stdlib.h>
```

```
Using namespace std;
```

```
fstream f1, f2, f3;
```

```
void create lists() {
```

```
int n, m;
```

```
char name[20];
```

```
f1.open("File.txt", ios::out);
```

```
f2.open("File2.txt", ios::out);  
if ((!f1) || (!f2))
```

```
{
```

```
    cout << "Unable to open the files!";  
    exit(0);
```

```
}
```

```
    cout << "Enter the total no. of. names in file 1:";
```

```
    cin >> n;
```

```
    cout << "Enter the total number of names in file 2:";
```

```
    cin >> m;
```

```
    int i;
```

```
    cout >> "Enter the names in file 2 1:";
```

```
    for (i = 0; i < n; i++) {
```

```
        cin >> name;
```

```
        f1 << name;
```

```
        f1 << "\n";
```

```
}
```

```
    cout >> "Enter the names in file 2:";
```

```
    for (i = 0; i < m; i++)
```

```
{
```

```
    cin >> name;
```

```
    f2 << name;
```

```
    f2 << "\n";
```

```
}
```

```
f1.close();
```

```
f2.close();
```

```
}
```

```
void Coseqmatch()
```

```
{
```

```
    char list1[50][20], list2[60][20];
```

```
    f1.open("File1.txt", ios::in);
```

```
    f2.open("File2.txt", ios::outin);
```

```
    f3.open("File3.txt", ios::out);
```

```
    if(!f1 || !f2 || !f3)
```

```
    {
```

```
        cout << "unable to create new files";
```

```
        exit(0);
```

```
    }
```

```
    int n, m = 0;
```

```
    n = 0;
```

```
    while (!f1.eof())
```

```
    {
```

```
f1.getline(list1[n], 20);  
cout << list1[n] << "\n";  
n++;
```

```
}
```

```
cout << "Elements in list 2: \n"  
<< endl;
```

```
while (!f2.eof())
```

```
{
```

```
    f2.getline(list2[m], 20);
```

```
    cout << list2[m] << "\n";
```

```
    m++;
```

```
}
```

```
int i, j, k;
```

```
i = j = 0;
```

```
k = 0;
```

```
cout << "Common names: \n" << endl;
```

```
while (i < n - 1 || j < m - 1)
```

```
{ if (strcmp(list1[i], list2[j]) == 0)
```

```
{
```

```
    f3 << list1[i] << "\n";
```

```
    cout << "File 3 has" << list1[i] << "\n";
```

```
    i++
```

```
    j++
```



```

    k++;
}
else if (str_cmp(list1[i], list2[j]) < 0)
    i++;
else
    j++;
}
if (k == 0)
    cout << "There are no common elements" << endl;
}

int main()
{
    create_lists();
    compare_match();
}

```

Output:

\$./a.out

Enter the number of names in file 1: 3

Enter the number of names in file 2: 3.

Enter names in file 1:

Sooraj

Singh

Ashay

Enter names in file 2:

Sooraj

Singh

Veena.

Common names:

File 3 has Sooraj

File 3 has Singh.

Output 2:

\$./a.out

Enter names in file 1: 2.

Enter no. of files in file 2: 2.

Enter names in file 1:

Sooraj

Singh.

Enter names in file 2:

Anirudh ~~KP~~.

KP.

Common names:

there are no common names.