

FILE HANDLING

AIM:

To demonstrate the file handling in c++ using some function.

ALGORITHM:

1: Create, Open and Write to a File

Declare an fstream object.

Open the file in write mode using ios::out.

Check whether the file is created successfully.

Write the given text into the file.

Close the file.

2: Open and Append Text to the File

Declare an fstream object.

Open the existing file in append mode using ios::app.

Check whether the file is opened successfully.

Append additional text at the end of the file.

Close the file.

3: Open and Read Text from the File

Declare an fstream object and a string variable.

Open the file in read mode using ios::in.

Check whether the file is opened successfully.

Read the contents of the file line by line.

Display the file contents on the screen.

Close the file.

4: Print Content After 20th Character

Declare an fstream object and a string variable.

Open the file in read mode using ios::in.

Check whether the file is opened successfully.

Move the file pointer to the 20th character using seekg().

Read the content from the current pointer position.

Display the content after the 20th character.

PROGRAM:

```
/*
 * Program to demonstrate file handling in C++
 * 1.Create ,open and write text to a file
 * Author : MUTHUGANESH S
 * Date   : 28/1/2026
 * Filename: FileHandling1.cpp
 * retval  : void
 */

#include <iostream>
#include <fstream>
using namespace std;

int main(){
    fstream File;
    string Text;

    File.open("Sample.txt", ios::out); // Open file in write mode
    if(!File){
        cout << "Error in creating file..." << endl;
        return -1;
    }

    File << "Hello World!"; // Write text to file
    File.close(); // Close file
}
```

OUTPUT:

The screenshot shows a Windows desktop environment. On the left is a code editor window titled 'week 7' containing the C++ code above. On the right is a command prompt window titled 'C:\Windows\System32\cmd.exe'. The command prompt displays the following output:

```
Microsoft Windows [Version 10.0.26200.6899]
(c) Microsoft Corporation. All rights reserved.

M:\training\CPP\FILE>g++ FileHandling1.cpp -o FileHandling1.exe

M:\training\CPP\FILE>FileHandling1

M:\training\CPP\FILE>
```

PROGRAM:

```
/*
 * Program to demonstrate file handling in C++
 * 2. open and append more text to the file
 * Author : MUTHUGANESH S
 * Date   : 28/1/2026
 * Filename: FileHandling2.cpp
 * retval  : void
 */

#include <iostream>
#include <fstream>
using namespace std;

int main(){
    fstream File;
    string Text;

    File.open("Sample.txt", ios::app); // Open file in append mode
    if(!File){
        cout << "Error in opening file for appending..." << endl;
        return -1;
    }
    File << "\nWelcome to C++." // Append text to file
    File.close(); // Close file
}
```

OUTPUT:

C:\Windows\System32\cmd.e

```
Microsoft Windows [Version 10.0.26200.6899]
(c) Microsoft Corporation. All rights reserved.

M:\training\CPP\FILE>g++ FileHandling1.cpp -o FileHandling1.exe
M:\training\CPP\FILE>FileHandling1
M:\training\CPP\FILE>g++ FileHandling2.cpp -o FileHandling2.exe
M:\training\CPP\FILE>FileHandling2
M:\training\CPP\FILE>
```

week 7

```
#include stdio.h.txt
```

Sample.txt

```
Hello World!
Welcome to C++.
```

PROGRAM:

```
/*
 * Program to demonstrate virtual functions in C++
 * 3. open and read text from the file
 * Author : MUTHUGANESH S
 * Date   : 28/1/2026
 * Filename: FileHandling3.cpp
 * retval  : void
 */

#include <iostream>
```

```

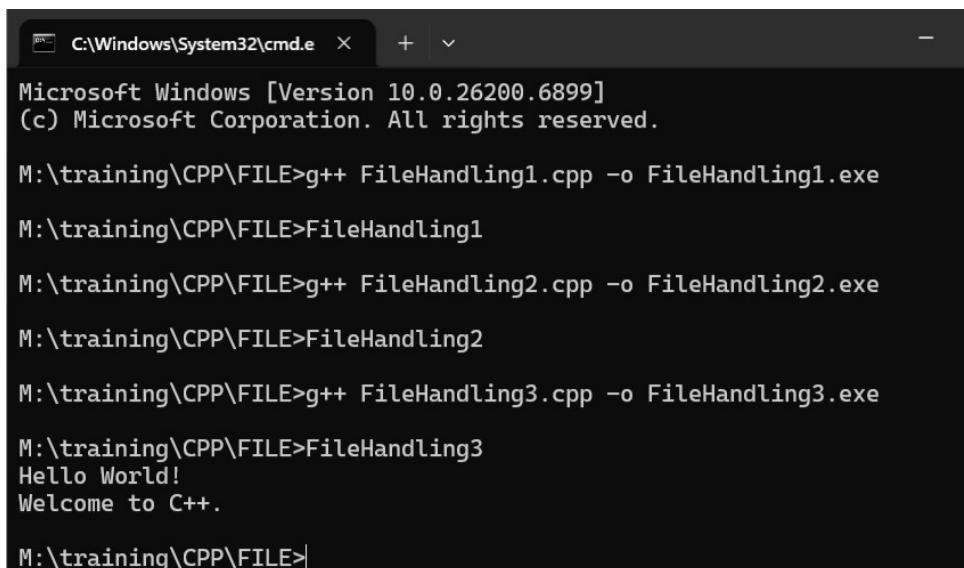
#include <fstream>
using namespace std;

int main(){
    fstream File;
    string Text;

    File.open("Sample.txt", ios::in); // Open file in read mode
    if(!File){
        cout << "Error in opening file for reading..." << endl;
        return -1;
    }
    while(getline(File, Text)){
        cout << Text << endl;
    }
    File.close(); // Close file
}

```

OUTPUT:



The screenshot shows a Windows Command Prompt window with the following output:

```

C:\Windows\System32\cmd.e × + ▾
Microsoft Windows [Version 10.0.26200.6899]
(c) Microsoft Corporation. All rights reserved.

M:\training\CPP\FILE>g++ FileHandling1.cpp -o FileHandling1.exe
M:\training\CPP\FILE>FileHandling1
M:\training\CPP\FILE>g++ FileHandling2.cpp -o FileHandling2.exe
M:\training\CPP\FILE>FileHandling2
M:\training\CPP\FILE>g++ FileHandling3.cpp -o FileHandling3.exe
M:\training\CPP\FILE>FileHandling3
Hello World!
Welcome to C++.

M:\training\CPP\FILE>

```

PROGRAM:

```

/*
 * Program to demonstrate file handling in C++
 * 4. open file and print content after 20th character
 * Author : MUTHUGANESH S
 * Date   : 28/1/2026
 * Filename: FileHandling4.cpp
 * retval  : void
 */

#include <iostream>
#include <fstream>
using namespace std;

int main(){
    fstream File;

```

```

string Text;

File.open("Sample.txt", ios::in); // Open file in read mode
if(!File){
    cout << "Error in opening file for reading..." << endl;
    return -1;
}
File.seekg(20, ios::beg); // Move pointer to 20th character
while(getline(File, Text)){
    cout << Text << endl;
}
File.close(); // Close file
}

```

OUTPUT:

The screenshot displays two windows side-by-side. On the left is a Windows Command Prompt window titled 'C:\Windows\System32\cmd.e'. It shows the execution of four C++ programs, each printing 'Hello World!' and 'Welcome to C++.' to the console. The command used in each case is 'g++ filename.cpp -o filename.exe' followed by the execution of the generated executable. The output is as follows:

```

Microsoft Windows [Version 10.0.26200.6899]
(c) Microsoft Corporation. All rights reserved.

M:\training\CPP\FILE>g++ FileHandling1.cpp -o FileHandling1.exe
M:\training\CPP\FILE>FileHandling1

M:\training\CPP\FILE>g++ FileHandling2.cpp -o FileHandling2.exe
M:\training\CPP\FILE>FileHandling2

M:\training\CPP\FILE>g++ FileHandling3.cpp -o FileHandling3.exe
M:\training\CPP\FILE>FileHandling3
Hello World!
Welcome to C++.

M:\training\CPP\FILE>g++ FileHandling4.cpp -o FileHandling4.exe
M:\training\CPP\FILE>FileHandling4
Hello World!
Welcome to C++.

M:\training\CPP\FILE>

```

On the right is a Microsoft Word document titled 'week 7'. It contains the text 'Hello World!' and 'Welcome to C++.', which corresponds to the output of the fourth program.