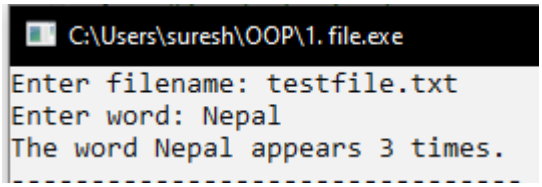
FILE HANDELING

1. Write a program to count and display number of occurrence of a word in a file.

PROGRAM

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

int main() {
	char filename[50], word_to_count[50], word[50];

	ifstream inf;

	cout<<"Enter filename: ";
	cin>>filename;
	inf.open(filename);
	cout<<"Enter word: ";
	cin>>word_to_count;

	if(!inf) {
		cout<<"Could not open file";
		return 0;
	}

	int count = 0;

	while(inf >> word) {
		if(strcmp(word, word_to_count) == 0)
			count++;
	}

	inf.close();

	cout<<"The word "<<word_to_count<<" appears "<<count<<" times.";

	return 0;
}
```

OUTPUT



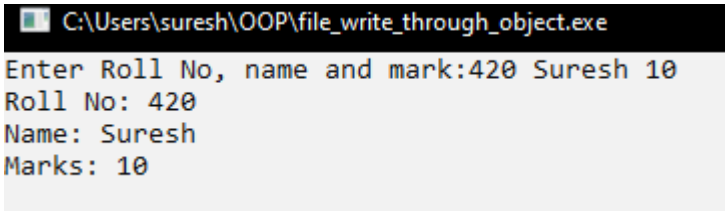
2. WAP to read and write values through object using File Handling.

PROGRAM

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

class Student {
	int rollNo;
	string name;
	float marks;

	public:
		void getData() {
			cout << "Enter Roll No, name and mark:";
			cin>>rollNo>>name>>marks;
		}

	void showData() {
		cout << "Roll No: " << rollNo << endl;
		cout << "Name: " << name << endl;
		cout << "Marks: " << marks << endl;
	}

	void writeToFile() {
		ofstream outFile("student.txt");
		if (!outFile) {
			cout << "File could not be opened." << endl;
		return;
	}
	outFile << rollNo << endl;
```

```
        outFile << name << endl;
        outFile << marks << endl;
        outFile.close();
        }

        void readFromFile() {
                ifstream inFile("student.txt");
                if (!inFile) {
                        cout << "File could not be opened." << endl;
                return;
        }

        inFile >> rollNo;
        inFile >> name;
        inFile >> marks;

        inFile.close();
        }
};

int main() {
Student student;

student.getData();
student.writeToFile();

student.readFromFile();
student.showData();
return 0;
}
```

OUTPUT



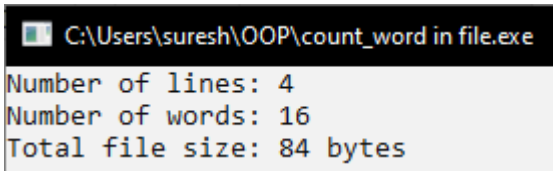
3. WAP to Count Words Lines and Total Size using File Handling.

PROGRAM

```
#include <iostream>
#include <fstream>
using namespace std;
int main() {
	ifstream file("testfile.txt");
	if (!file) {
		cout << "File could not be opened." << endl;
		return 0;
	}
	int wordCount = 0, lineCount = 1, charCount = 0;
	char ch;
	int inWord = 0;
	while (file.get(ch)) {
		charCount++;
		if (ch == '\n') {
			lineCount++;
		}
		if (isspace(ch)) {
			if (inWord == 1) {
				wordCount++;
				inWord = 0;
			}
		} else {
```

```
                inWord = 1;
            }
        }
        // To count the last word if the file doesn't end with a space or newline
        if (inWord == 1) {
            wordCount++;
        }
        file.close();
        cout << "Number of lines: " << lineCount << endl;
        cout << "Number of words: " << wordCount << endl;
        cout << "Total file size: " << charCount << " bytes" << endl;
        return 0;
}
```

OUTPUT



4. WAP to read text from one file and write in another text file using File Handling.

PROGRAM

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

int main() {
    // Open the input file
    ifstream inputFile("testfile.txt");
    if (!inputFile) {
```

```
        cout << "Error opening input file!" << endl;
        return 1;
    }
    // Open the output file
    ofstream outputFile("output.txt");
    if (!outputFile) {
        cerr << "Error opening output file!" << endl;
        return 1;
    }
    // Read from the input file and write to the output file
    string line;
    while (getline(inputFile, line)) {
        outputFile << line << endl;
    }
    inputFile.close();
    outputFile.close();
    cout << "File copying completed successfully." << endl;
    return 0;
}
```

OUTPUT

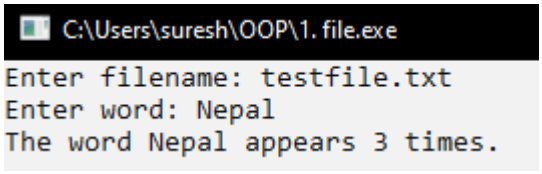
5. Write a program to write and read an object in a file.

PROGRAM

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

int main() {
```

```
	char filename[50], word_to_count[50], word[50];

	ifstream inf;

	cout<<"Enter filename: ";
	cin>>filename;
	inf.open(filename);
	cout<<"Enter word: ";
	cin>>word_to_count;

	if(!inf) {
		cout<<"Could not open file";
		return 0;
	}

	int count = 0;

	while(inf >> word) {
		if(strcmp(word, word_to_count) == 0)
			count++;
	}

	inf.close();

	cout<<"The word "<<word_to_count<<" appears "<<count<<" times.";

	return 0;
}
```

OUTPUT


C:\Users\suresh\OOP\1. file.exe
Enter filename: testfile.txt
Enter word: Nepal
The word Nepal appears 3 times.