**Modern Education Society’s**

**College of Engineering, Pune**

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| **NAME OF STUDENT:** Prathamesh Kalyan Sable | **CLASS:** SE Comp 1 |
| **SEMESTER/YEAR:** Sem-3 / 2022-23 | **ROLL NO:** 015 |
| **DATE OF PERFORMANCE:**  / /2022 | **DATE OF SUBMISSION:** / /2022 |
| **EXAMINED BY:** Prof. R. H. Shende | **EXPERIMENT NO: B-4** |

###### TITLE: FILE HANDLING

**PROBLEM STATEMENT:**  Write a C++ program that creates an output file, writes information to it, closes the file and open it again as an input file and read the information from the file.

### **OBJECTIVES:**

1. Provide programming insight using OOP constructs.
2. To lay a foundation for advanced programming.

### **OUTCOMES:**

1. Develop programming application using object-oriented programming language C++.
2. Analyze the strengths of object-oriented programming.

**PRE-REQUISITES:**

* 1. Knowledge of input, output streams.
  2. Knowledge of reading and writing class objects.
  3. Knowledge of steps involved in using a file in C++ program.

**APPARATUS:**

Computer system with g++ installed

**QUESTIONS:**

1. What is a file mode? Describe the various file mode options available.
2. What is the difference between opening a file with constructor function and opening a file with open() function? When is one method preferred over the other?

**SOURCE CODE:**

#include<iostream>

#include<fstream>

#include<iomanip>

using namespace std;

void write\_file(){

    string str;

    int n;

    cout<<"Enter number of lines you want to enter:";

    cin>>n;

    ofstream file("OOP\_fileHand.txt");

    cin.ignore();

    for(int l = 1;l<=n;l++){

        cout<<"Enter Line "<<l<<":";

        getline(cin,str);

        file<<str<<endl;

    }

    file.close();

    cout<<"\*Data written Sucessfully"<<endl;

}

void read\_file(){

    string str;

    ifstream file("OOP\_fileHand.txt");

    if(file){

        cout<<"\*Reading From file"<<endl;

    }else{

        cout<<"\*File not Found"<<endl;

        return;

    }

    int line=0;

    while(getline(file,str)){

        cout<<str<<endl;

        line++;

    }

    file.close();

    if(line==0){

        cout<<"\*File is Empty"<<endl;

    }

}

void append\_file(){

    string str;

    int n;

    cout<<"Enter Number of Lines you want to Add:";

    cin>>n;

    ofstream file("OOP\_fileHand.txt",ios::app);

    cin.ignore();

    for(int l = 1;l<=n;l++){

        cout<<"Enter Line "<<l<<":";

        getline(cin,str);

        file<<str<<endl;

    }

    file.close();

    cout<<"\*Data Added Sucessfully"<<endl;

    }

int main(){

    int choice;

    bool loop\_control = true;

    while(loop\_control){

        cout<<setw(7)<<" "<<"MENU"<<setw(7)<<" "<<endl;

        cout<<"1. Write to File"<<endl;

        cout<<"2. Read from File"<<endl;

        cout<<"3. Add to File"<<endl;

        cout<<"4. Exit"<<endl;

        cout<<"Enter your choice:";

        cin>>choice;

        switch (choice){

            case 1:

                write\_file();

                break;

            case 2:

                read\_file();

                break;

            case 3:

                append\_file();

                break;

            case 4:

                loop\_control = false;

                break;

            default:

                cout<<"Enter a valid choice"<<endl;

                break;

        }

    }

    cout<<"Thank you"<<endl;

    return 0;

}

**OUTPUT:**

