Lab 9

Name: Etcherla Sai Manoj   **Mis. No:** 112015044   **Branch:** CSE

Question1:

Code:

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

int main(){
    fstream my_file;
    //writing a file
    my_file.open("first.txt", ios::out);
    if(!my_file){
        cout << "File not found\n";
    }
    else{
        cout << "File found\n";
        cout << "Writing in file...\n";
        my_file << "This file is created by Sai Manoj Etcherla";
        cout << "Writing Completed\n";
        my_file.close();
    }
    //reading a file and printing its contents
    cout << "\nReading and Printing content of file...\n\n";
    my_file.open("first.txt", ios::in);
    if(!my_file){
        cout << "No such file is found\n";
    }
    else{
        string s;
        while(getline(my_file, s)){
            cout << s << endl;
            if(my_file.eof()) break;
        }
    }
    my_file.close();
    return 0;
}
```

Input & Output:

```
PS C:\Users\DELL\OneDrive\Desktop\Labs> cd "c:\Users\DELL\OneDrive\Desktop\Labs\OOPM LAB\LAB 9\" ; if ($?) { g++ 1.cpp -o 1 } ; if ($?) { .\1 }
File found
Writing in file...
Writing Completed

Reading and Printing content of file...

This file is created by Sai Manoj Etcherla
PS C:\Users\DELL\OneDrive\Desktop\Labs\OOPM LAB\LAB 9>
```

Question2:

Code:

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

int main(){
    string name, designation, dob, salary;
    cout << "Enter employee name : ";
    cin >> name;
    cout << "Enter employee designation : ";
    cin >> designation;
    cout << "Enter employee date of birth (dd/mm/yy) : ";
    cin >> dob;
    cout << "Enter employee salary(per month) : ";
    cin >> salary;
    fstream my_file;
    //writing a file
    my_file.open("Emp.txt", ios::out);
    if(!my_file){
        cout << "File not found\n";
    }
    else{
        cout << "\nFile found\n";
        cout << "Wrinting employee details in file...\n";
        my_file << "Employee name : " << name << "\n";
        my_file << "Employee designation : " << designation << "\n";
        my_file << "Employee date of birth(dd/mm/yy) : " << dob << "\n";
        my_file << "Employee salary : " << salary;
        cout << "Writing completed\n";
        my_file.close();
    }
    //reading a file and printing its contents
    cout << "\nReading and Printing content of file...\n";
    cout << "-----------------------------------------\n";
    my_file.open("Emp.txt", ios::in);
    if(!my_file){
        cout << "No such file is found\n";
    }
    else{
        string s;
        while(getline(my_file, s)){
            cout << s << endl;
            if(my_file.eof()) break;
        }
    }
    cout << "-----------------------------------------\n";
    my_file.close();
    return 0;
}
```

Input & Output:

```
PS C:\Users\DELL\OneDrive\Desktop\Labs> cd "c:\Users\DELL\OneDrive\Desktop\Labs\OOPM LAB\LAB 9\" ; if ($?) { g++ 2.cpp -o 2 } ; if ($?) { .\2 }
Enter employee name : Manoj
Enter employee designation : Data_Analyst
Enter employee date of birth (dd/mm/yy) : 01/01/1997
Enter employee salary(per month) : 100000

File found
Wrinting employee details in file...
Writing completed

Reading and Printing content of file...
-----------------------------------------
Employee name : Manoj
Employee designation : Data_Analyst
Employee date of birth(dd/mm/yy) : 01/01/1997
Employee salary : 100000
-----------------------------------------
PS C:\Users\DELL\OneDrive\Desktop\Labs\OOPM LAB\LAB 9> 
```

Question3:

Code:

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

int main() {
    string str;
    string temp = "";
    cout << "-----------------------------------------\n";
    cout << "Enter a string: ";
    getline(cin, str);

    for (int i = 0; i < str.size(); ++i) {
        if ((str[i] >= 'a' && str[i] <= 'z') || (str[i] >= 'A' && str[i] <= 'Z') || (str[i] >= '0' && str[i] <= '9')) {
            temp = temp + str[i];
        }
    }
    str = temp;
    for(int i = 0; i < str.size(); ++i){
        if(isupper(str[i])){
            str[i] = tolower(str[i]);
        }
    }
    cout << "\nFinal String : " << str << endl;
    int length = str.length(), flag = 0;
    for(int i = 0; i < str.size(); ++i){
        if(str[i] != str[length-i-1]){
            flag = 1;
            break;
        }
    }
    if(flag){
        cout << "\nThe string is not a PALINDROME\n";
    }
    else{
        cout << "\nThe string is a PALINDROME\n";
    }
    cout << "-----------------------------------------\n";
    return 0;
}
```

Input & Output:

```
PS C:\Users\DELL\OneDrive\Desktop\Labs> cd "c:\Users\DELL\OneDrive\Desktop\Labs\OOPM LAB\LAB 9\" ; if ($?) { g++ 3.cpp -o 3 } ; if ($?) { .\3 }
-----------------------------------------
Enter a string: "Madam! I'm Adam"

Final String : madamimadam

The string is a PALINDROME
-----------------------------------------
PS C:\Users\DELL\OneDrive\Desktop\Labs\OOPM LAB\LAB 9> cd "c:\Users\DELL\OneDrive\Desktop\Labs\OOPM LAB\LAB 9\" ; if ($?) { g++ 3.cpp -o 3 } ; if ($?) { .\3 }
-----------------------------------------
Enter a string: "Madam! 9"

Final String : madam9

The string is not a PALINDROME
-----------------------------------------
PS C:\Users\DELL\OneDrive\Desktop\Labs\OOPM LAB\LAB 9> cd "c:\Users\DELL\OneDrive\Desktop\Labs\OOPM LAB\LAB 9\" ; if ($?) { g++ 3.cpp -o 3 } ; if ($?) { .\3 }
-----------------------------------------
Enter a string: "9. Madam! 9"

Final String : 9madam9

The string is a PALINDROME
-----------------------------------------
PS C:\Users\DELL\OneDrive\Desktop\Labs\OOPM LAB\LAB 9> █
```