College Management System

A Mini Project Report

Submitted for

19EC381 – Programming Using C++ and Python
(Lab Component)

By

Jeyanthan.G.J (Roll No.22BEC170)

SelvaRaj.R.S (Roll No.22BEC181)

II Year B.E ECE C

Department of Electronics and Communication Engineering

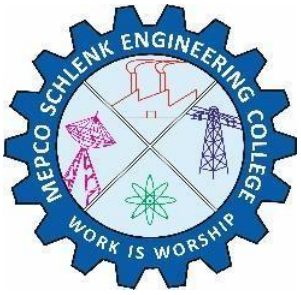
Academic Year 2023 - 2024

Mepco Schlenk Engineering College

(An Autonomous Institution Affiliated to Anna University, Chennai)

Mepco Engineering College (PO), Sivakasi – 626 005

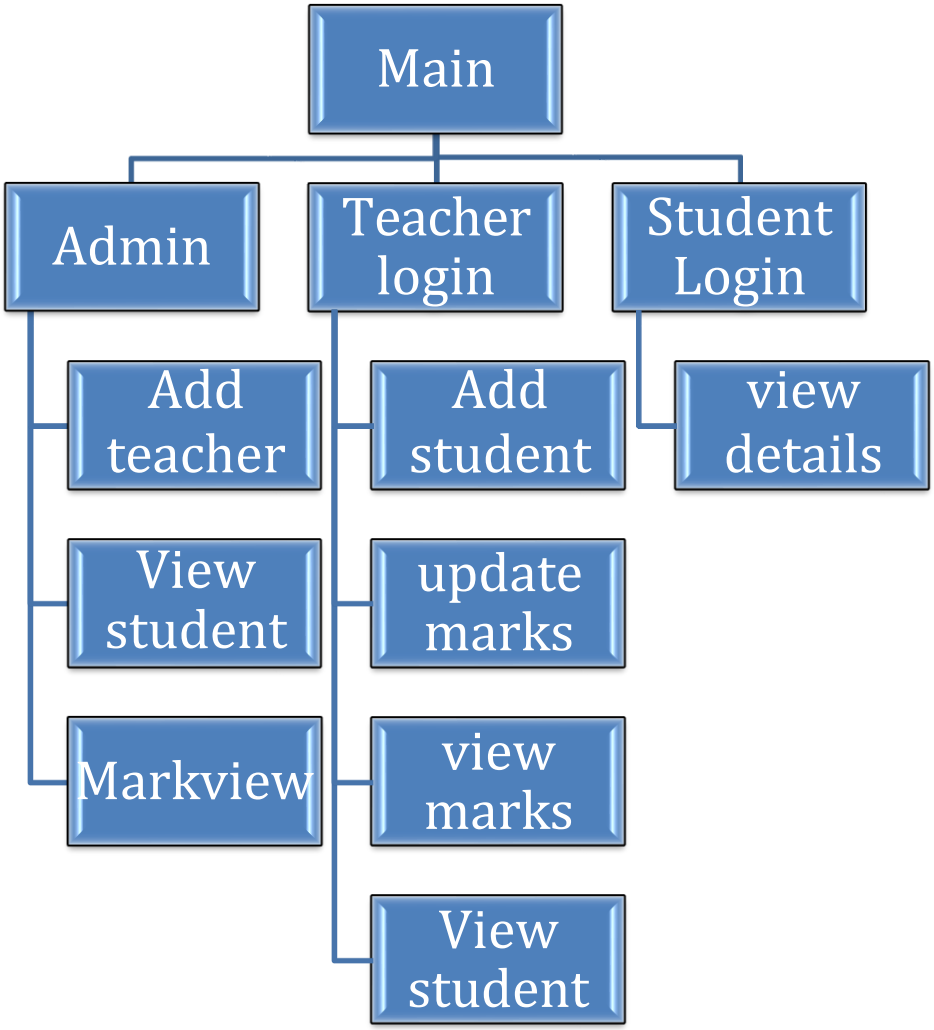
Virudhunagar (District), Tamil Nadu



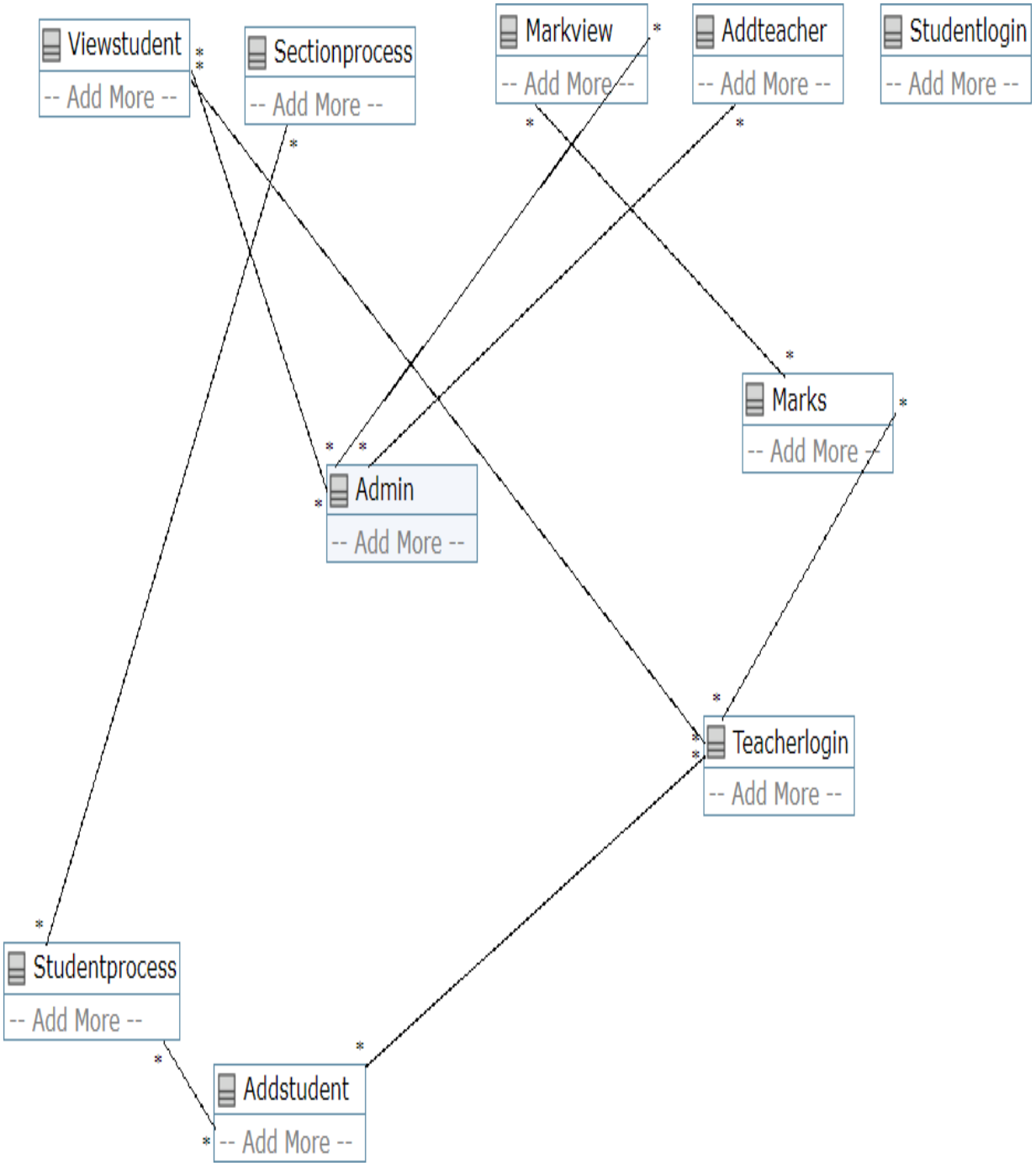
December 2023

TABLE OF CONTENTS

Flow Diagram



Class Diagram:



Code:

```
#include<iostream>
#include<fstream>
#include<string>
using namespace std;
class viewstudent{
        protected:
                char c[3000];
                string a,b,d;
        public:
                void detailss(){
                        stud:
                        cout<<"\nEnter the class name(IN CAPITAL LETTER):";
                        cin>>a;
                        cout<<"\nEnter the section(IN CAPITAL LETTER):";
                        cin>>b;
                        d=a+"-"+b+".txt";
                        ifstream f(d);
                        if(f.good()){
                        f.read((char*)&c,sizeof(c));
                        cout<<c;
                        f.close();
                        }
                        else
                        cout<<"\nClass not found try again";
                        goto stud;
                }
};
class markview {
protected:
    string a1, b, c1, d;
    char c[3000];
public:
    void viewmark() {
        markk:
         cout << "\nEnter the exam name:";
         cin >> c1;
         cout << "\nEnter the class:";
         cin >> a1;
         cout << "\nEnter the section:";
         cin >> b;
         d = a1 + b + c1 + ".txt";
         ifstream f(d);
                                if(f.good()){
                         f.read((char*)&c,sizeof(c));
                         cout<<c;
                         f.close();
                        }
                        else{
                        cout<<"\nClass not found try again";
                        goto markk;}
                }
};
class marks:public markview{
        protected:
                string f[3000];
```

```
int n;
string a,b,c,d;
public:
void mark2(){
        viewmark();
        }
void mark(){
        cout<<"Enter the exam name:";
        cin>>c;
        cout<<"Enter the class:";
        cin>>a;
        cout<<"Enter the section:";
        cin>>b;
        d=a+b+c+".txt";
        if(a=="ece"||a=="ECE"){
                if(b=="a"||b=="A"){
                    ifstream f1("ECE-A.txt");
                    ofstream f2(d);
                    int i=0;
                    while(!f1.eof()){
                             f1>>f[i];
                             i++;
                          }
                   cout<<"Enter the number of subjects:";
                   cin>>n;
                   int m[n];
                   for(int j=0;j<i-1;j=j+5){
                      cout<<"Enter the marks for "<<f[j];
                      f2<<f[j];
                      for(int k=0;k<n;k++){
                        cout<<"\nEnter the marks for subject
"<<k+1<<":";

                        cin>>m[k];
                        f2<<"\t"<<m[k];
                                        }
                        f2<<"\n";
                                }
                        f1.close();
                        f2.close();
                        }
                else if(b=="b"||b=="B"){
                  ifstream f1("ECE-B.txt");
                  ofstream f2(d);
                  int i=0;
                  while(!f1.eof()){
                          f1>>f[i];
                         i++;
                         }
                    cout<<"Enter the number of subjects:";
                    cin>>n;
                    int m[n];
                    for(int j=0;j<i-1;j=j+5){
                       cout<<"Enter the marks for "<<f[j];
                       f2<<f[j];
                       for(int k=0;k<n;k++){
                        cout<<"\nEnter the marks for subject
"<<k+1<<":";
```

```
                                        cin>>m[k];
                                        f2<<"\t"<<m[k];
                                                }
                                        f2<<"\n";
                                        }
                                        f1.close();
                                        f2.close();
                                        }
                                        else if(b=="c"||b=="C"){
                                                ifstream f1("ECE-C.txt");
                                                ofstream f2(d);
                                                int i=0;
                                                while(!f1.eof()){
                                                  f1>>f[i];
                                                  i++;
                                         }
                                       cout<<"Enter the number of subjects:";
                                       cin>>n;
                                       int m[n];
                                       for(int  j=0;j<i-1;j=j+5){
                                        cout<<"Enter the marks for "<<f[j];
                                        f2<<f[j];
                                        for(int k=0;k<n;k++){
                                         cout<<"\nEnter the marks for subject
"<<k+1<<":";

                                         cin>>m[k];
                                                f2<<"\t"<<m[k];
                                                        }
                                                        f2<<"\n";
                                                }
                                                f1.close();
                                                f2.close();
                                        }
                                        else{
                                        cout<<"Invalid section";
                                        cout<<"\nPlease try again";
                                }

}
else if(a=="eee"||a=="EEE"){
        if(b=="a"||b=="A"){
                ifstream f1("EEE-A.txt");
                ofstream f2(d);
                 int i=0;
                 while(!f1.eof()){
                   f1>>f[i];
                  i++;
                                         }
                                cout<<"Enter the number of subjects:";
                                cin>>n;
                                int m[n];
                                for(int j=0;j<i-1;j=j+5){
                                    cout<<"Enter the marks for "<<f[j];
                                    f2<<f[j];
                                    for(int k=0;k<n;k++){
                                            cout<<"\nEnter the marks for
subject "<<k+1<<":";
```

```
                                        cin>>m[k];
                                        f2<<"\t"<<m[k];
                                                }
                                                f2<<"\n";
                                        }
                                        f1.close();
                                        f2.close();
                                }
                                else if(b=="b"||b=="B"){
                                        ifstream f1("EEE-B.txt");
                        ofstream f2(d);
                        int i=0;
                        while(!f1.eof()){
                                        f1>>f[i];
                                        i++;
                                 }
                               cout<<"Enter the number of subjects:";
                               cin>>n;
                               int m[n];
                               for(int j=0;j<i-1;j=j+5){
                                   cout<<"Enter the marks for "<<f[j];
                                   f2<<f[j];
                                   for(int k=0;k<n;k++){
                                        cout<<"\nEnter the marks for
subject "<<k+1<<":";

                                        cin>>m[k];
                                        f2<<"\t"<<m[k];
                                                }
                                                f2<<"\n";
                                        }
                                        f1.close();
                                        f2.close();
                                }
                                else{
                                cout<<"Invalid section";
                                cout<<"\nPlease try again";
                          }
}
else if(a=="mech"||a=="MECH"){
        if(b=="a"||b=="A"){
                        ifstream f1("MECH-A.txt");
                        ofstream f2(d);
                        int i=0;
                        while(!f1.eof()){
                                        f1>>f[i];
                                        i++;
                                 }
                               cout<<"Enter the number of subjects:";
                               cin>>n;
                               int m[n];
                               for(int j=0;j<i-1;j=j+5){
                                   cout<<"Enter the marks for "<<f[j];
                                   f2<<f[j];
                                   for(int k=0;k<n;k++){
                                        cout<<"\nEnter the marks for
subject "<<k+1<<":";

                                        cin>>m[k];
```

```
                                        f2<<"\t"<<m[k];
                                                }
                                                f2<<"\n";
                                        }
                                        f1.close();
                                        f2.close();
                                }
                                else if(b=="b"||b=="B"){
                                        ifstream f1("MECH-B.txt");
                        ofstream f2(d);
                        int i=0;
                        while(!f1.eof()){
                                        f1>>f[i];
                                        i++;
                                 }
                               cout<<"Enter the number of subjects:";
                               cin>>n;
                               int m[n];
                               for(int j=0;j<i-1;j=j+5){
                                   cout<<"Enter the marks for "<<f[j];
                                   f2<<f[j];
                                   for(int k=0;k<n;k++){
                                           cout<<"\nEnter the marks for
subject "<<k+1<<":";

                                           cin>>m[k];
                                           f2<<"\t"<<m[k];
                                                   }
                                                   f2<<"\n";
                                           }
                                           f1.close();
                                           f2.close();
                                   }
                                   else{
                                   cout<<"Invalid section";
                                   cout<<"\nPlease try again";
                             }
}
else if(a=="it"||a=="IT"){
        if(b=="a"||b=="A"){
                        ifstream f1("IT-A.txt");
                        ofstream f2(d);
                        int i=0;
                        while(!f1.eof()){
                                        f1>>f[i];
                                        i++;
                                 }
                               cout<<"Enter the number of subjects:";
                               cin>>n;
                               int m[n];
                               for(int j=0;j<i-1;j=j+5){
                                   cout<<"Enter the marks for "<<f[j];
                                   f2<<f[j];
                                   for(int k=0;k<n;k++){
                                           cout<<"\nEnter the marks for
subject "<<k+1<<":";

                                           cin>>m[k];
                                           f2<<"\t"<<m[k];
```

```
                                        }
                                        f2<<"\n";
                                    }
                                    f1.close();
                                    f2.close();
                                }
                                else if(b=="b"||b=="B"){
                                        ifstream f1("IT.txt");
                            ofstream f2(d);
                            int i=0;
                            while(!f1.eof()){
                                        f1>>f[i];
                                        i++;
                                     }
                                cout<<"Enter the number of subjects:";
                                cin>>n;
                                int m[n];
                                for(int j=0;j<i-1;j=j+5){
                                    cout<<"Enter the marks for "<<f[j];
                                    f2<<f[j];
                                    for(int k=0;k<n;k++){
                                            cout<<"\nEnter the marks for
subject "<<k+1<<":";
                                            cin>>m[k];
                                            f2<<"\t"<<m[k];
                                                    }
                                                    f2<<"\n";
                                            }
                                            f1.close();
                                            f2.close();
                                }
                                else{
                                cout<<"Invalid section";
                                cout<<"\nPlease try again";
                                  }
}
else if(a=="cse"||a=="CSE"){
                                        if(b=="a"||b=="A"){
                            ifstream f1("CSE-A.txt");
                            ofstream f2(d);
                            int i=0;
                            while(!f1.eof()){
                                        f1>>f[i];
                                        i++;
                                     }
                                cout<<"Enter the number of subjects:";
                                cin>>n;
                                int m[n];
                                for(int j=0;j<i-1;j=j+5){
                                    cout<<"Enter the marks for "<<f[j];
                                    f2<<f[j];
                                    for(int k=0;k<n;k++){
                                            cout<<"\nEnter the marks for
subject "<<k+1<<":";
                                            cin>>m[k];
                                            f2<<"\t"<<m[k];
                                                    }
```

```
                                        f2<<"\n";
                                }
                                f1.close();
                                f2.close();
                        }
                        else if(b=="b"||b=="B"){
                                ifstream f1("CSE-B.txt");
                ofstream f2(d);
                int i=0;
                while(!f1.eof()){
                                f1>>f[i];
                                i++;
                         }
                cout<<"Enter the number of subjects:";
                cin>>n;
                int m[n];
                for(int j=0;j<i-1;j=j+5){
                    cout<<"Enter the marks for "<<f[j];
                    f2<<f[j];
                    for(int k=0;k<n;k++){
                                cout<<"\nEnter the marks for
subject "<<k+1<<":";
                                cin>>m[k];
                                f2<<"\t"<<m[k];
                                        }
                                        f2<<"\n";
                                }
                                f1.close();
                                f2.close();
                        }
                        else if(b=="c"||b=="C"){
                                ifstream f1("CSE-C.txt");
                ofstream f2(d);
                int i=0;
                while(!f1.eof()){
                                f1>>f[i];
                                i++;
                         }
                cout<<"Enter the number of subjects:";
                cin>>n;
                int m[n];
                for(int j=0;j<i-1;j=j+5){
                    cout<<"Enter the marks for "<<f[j];
                    f2<<f[j];
                    for(int k=0;k<n;k++){
                                cout<<"\nEnter the marks for
subject "<<k+1<<":";
                                cin>>m[k];
                                f2<<"\t"<<m[k];
                                        }
                                        f2<<"\n";
                                }
                                f1.close();
                                f2.close();
                        }
                        else{
                        cout<<"Invalid section";
```

```
                                        cout<<"\nPlease try again";
                                }

}
else{
        cout<<"Invalid class";
        cout<<"\nPlease try again";
}
}
};
class sectionprocess{
        protected:
                string f[30000];
                public:
                        void eee(){
                                ofstream f1("EEE-A.txt",ios::app);
                                ofstream f2("EEE-B.txt",ios::app);
                                ifstream f3("EEE.txt",ios::app);
                                int i=0;
                           while(!f3.eof()){
                                 f3>>f[i];
                                  i++;
                           }
                           for(int j=0;j<i;j++){
                                if(f[j]=="a"){
                                     f1<<f[j-2];
                                     f1<<"\t"<<f[j-1];
                                     f1<<"\t"<<f[j];
                                     f1<<"\t"<<f[j+1];
                                     f1<<"\t"<<f[j+2];
                                     f1<<"\n";
                                 }
                                 if(f[j]=="b"){
                                     f2<<f[j-2];
                                     f2<<"\t"<<f[j-1];
                                     f2<<"\t"<<f[j];
                                     f2<<"\t"<<f[j+1];
                                     f2<<"\t"<<f[j+2];
                                     f2<<"\n";
                                 }
                           }
                           f1.close();
                           f2.close();
                           f3.close();
}
void ece(){
                                ofstream f1("ECE-A.txt",ios::app);
                                ofstream f2("ECE-B.txt",ios::app);
                                ofstream f3("ECE-c.txt",ios::app);
                                ifstream f4("ECE.txt",ios::app);
                                int i=0;
                           while(!f4.eof()){
                                 f4>>f[i];
                                  i++;
                           }
                           for(int j=0;j<i;j++){
                                if(f[j]=="a"){
```

```
                    f1<<f[j-2];
                    f1<<"\t"<<f[j-1];
                    f1<<"\t"<<f[j];
                    f1<<"\t"<<f[j+1];
                    f1<<"\t"<<f[j+2];
                    f1<<"\n";
                }
                if(f[j]=="b"){
                    f2<<f[j-2];
                    f2<<"\t"<<f[j-1];
                    f2<<"\t"<<f[j];
                    f2<<"\t"<<f[j+1];
                    f2<<"\t"<<f[j+2];
                    f2<<"\n";
                }
                if(f[j]=="c"){
                    f3<<f[j-2];
                    f3<<"\t"<<f[j-1];
                    f3<<"\t"<<f[j];
                    f3<<"\t"<<f[j+1];
                    f3<<"\t"<<f[j+2];
                    f3<<"\n";
                }
            }
            f1.close();
            f2.close();
            f3.close();
            f4.close();
}
void cse(){
                ofstream f1("CSE-A.txt",ios::app);
                ofstream f2("CSE-B.txt",ios::app);
                ofstream f3("CSE-c.txt",ios::app);
                ifstream f4("CSE.txt",ios::app);
                int i=0;
           while(!f4.eof()){
                 f4>>f[i];
                  i++;
            }
            for(int j=0;j<i;j++){
                if(f[j]=="a"){
                    f1<<f[j-2];
                    f1<<"\t"<<f[j-1];
                    f1<<"\t"<<f[j];
                    f1<<"\t"<<f[j+1];
                    f1<<"\t"<<f[j+2];
                    f1<<"\n";
                }
                if(f[j]=="b"){
                    f2<<f[j-2];
                    f2<<"\t"<<f[j-1];
                    f2<<"\t"<<f[j];
                    f2<<"\t"<<f[j+1];
                    f2<<"\t"<<f[j+2];
                    f2<<"\n";
                }
                if(f[j]=="c"){
```

```
                                        f3<<f[j-2];
                                        f3<<"\t"<<f[j-1];
                                        f3<<"\t"<<f[j];
                                        f3<<"\t"<<f[j+1];
                                        f3<<"\t"<<f[j+2];
                                        f3<<"\n";
                                    }
                                }
                                f1.close();
                                f2.close();
                                f3.close();
                                f4.close();
                            }
                            void mech(){
                                    ofstream f1("MECH-A.txt",ios::app);
                                    ofstream f2("MECH-B.txt",ios::app);
                                    ifstream f3("MECH.txt",ios::app);
                                    int i=0;
                                while(!f3.eof()){
                                     f3>>f[i];
                                      i++;
                                }
                                for(int j=0;j<i;j++){
                                    if(f[j]=="a"){
                                        f1<<f[j-2];
                                        f1<<"\t"<<f[j-1];
                                        f1<<"\t"<<f[j];
                                        f1<<"\t"<<f[j+1];
                                        f1<<"\t"<<f[j+2];
                                        f1<<"\n";
                                    }
                                     if(f[j]=="b"){
                                        f2<<f[j-2];
                                        f2<<"\t"<<f[j-1];
                                        f2<<"\t"<<f[j];
                                        f2<<"\t"<<f[j+1];
                                        f2<<"\t"<<f[j+2];
                                        f2<<"\n";
                                    }
                                }
                                f1.close();
                                f2.close();
                                f3.close();
}
void itt(){
                                    ofstream f1("IT-A.txt",ios::app);
                                    ofstream f2("IT-B.txt",ios::app);
                                    ifstream f3("IT.txt",ios::app);
                                    int i=0;
                                while(!f3.eof()){
                                     f3>>f[i];
                                      i++;
                                }
                                for(int j=0;j<i;j++){
                                    if(f[j]=="a"||f[j]=="A"){
                                        f1<<f[j-2];
                                        f1<<"\t"<<f[j-1];
```

```
                                        f1<<"\t"<<f[j];
                                        f1<<"\t"<<f[j+1];
                                        f1<<"\t"<<f[j+2];
                                        f1<<"\n";
                                    }
                                    if(f[j]=="b"){
                                        f2<<f[j-2];
                                        f2<<"\t"<<f[j-1];
                                        f2<<"\t"<<f[j];
                                        f2<<"\t"<<f[j+1];
                                        f2<<"\t"<<f[j+2];
                                        f2<<"\n";
                                    }
                                }
                                f1.close();
                                f2.close();
                                f3.close();
}
};
class studentprocess:public sectionprocess{
        protected:
                string f[3000];
                public:
                        void processece(){
                                ifstream f1("student.txt");
                                ofstream f2("ECE.txt",ios::app);
                                int i=0;
                           while(!f1.eof()){
                                 f1>>f[i];
                                  i++;
                                }
                                for(int j=0;j<i;j++){
                                        if(f[j]=="ece"){
                                             f2<<f[j-1];
                                             f2<<"\t"<<f[j];
                                             f2<<"\t"<<f[j+1];
                                             f2<<"\t"<<f[j+2];
                                             f2<<"\t"<<f[j+3];
                                             f2<<"\n";
                                         }
                                }
                                f1.close();
                                f2.close();
                                ece();
                        }
                        void processcse(){
                                        ifstream f1("student.txt",ios::app);
                                        ofstream f2("CSE.txt",ios::app);
                                        int i=0;
                                   while(!f1.eof()){
                                         f1>>f[i];
                                          i++;
                                        }
                                        for(int j=0;j<i;j++){
                                                if(f[j]=="cse"){
                                                     f2<<f[j-1];
                                                     f2<<"\t"<<f[j];
```

```
                                f2<<"\t"<<f[j+1];
                                f2<<"\t"<<f[j+2];
                                f2<<"\t"<<f[j+3];
                                f2<<"\n";
                            }
                        }
                        f1.close();
                        f2.close();
                        cse();
}
void processeee(){
                            ifstream f1("student.txt",ios::app);
                            ofstream f2("EEE.txt",ios::app);
                            int i=0;
                       while(!f1.eof()){
                             f1>>f[i];
                              i++;
                        }
                        for(int j=0;j<i;j++){
                            if(f[j]=="eee"){
                                f2<<f[j-1];
                                f2<<"\t"<<f[j];
                                f2<<"\t"<<f[j+1];
                                f2<<"\t"<<f[j+2];
                                f2<<"\t"<<f[j+3];
                                f2<<"\n";
                            }
                        }
                        f1.close();
                        f2.close();
                        eee();
                }
                void processmech(){
                            ifstream f1("student.txt",ios::app);
                            ofstream f2("MECH.txt",ios::app);
                            int i=0;
                       while(!f1.eof()){
                             f1>>f[i];
                              i++;
                        }
                        for(int j=0;j<i;j++){
                            if(f[j]=="mech"){
                                f2<<f[j-1];
                                f2<<"\t"<<f[j];
                                f2<<"\t"<<f[j+1];
                                f2<<"\t"<<f[j+2];
                                f2<<"\t"<<f[j+3];
                                f2<<"\n";
                            }
                        }
                        f1.close();
                        f2.close();
                        mech();
                }
                void processit(){
                            ifstream f1("student.txt",ios::app);
                            ofstream f2("IT.txt",ios::app);
```

```
                        int i=0;
                    while(!f1.eof()){
                          f1>>f[i];
                           i++;
                    }
                    for(int j=0;j<i;j++){
                          if(f[j]=="it"){
                               f2<<f[j-1];
                               f2<<"\t"<<f[j];
                               f2<<"\t"<<f[j+1];
                               f2<<"\t"<<f[j+2];
                               f2<<"\t"<<f[j+3];
                               f2<<"\n";
                          }
                    }
                    f1.close();
                    f2.close();
                    itt();
              }
};
class addstudent:public studentprocess{
        protected:
                string nnn,dd,ss;
                long int aa;
                long long int mm;
              public:
                      void adds(){
                              cout<<"\nEnter the name:";
                              cin>>nnn;
                              cout<<"\nEnter the department:";
                              cin>>dd;
                              cout<<"\nEnter the section:";
                              cin>>ss;
                              cout<<"\nEnter the admission number:";
                              cin>>aa;
                              cout<<"\nEnter the mobile number:";
                              cin>>mm;
                              ofstream f1("student.txt",ios::app);
                              ofstream f3("ECE.txt",ios::trunc);
                              ofstream f4("ECE-A.txt",ios::trunc);
                              ofstream f5("ECE-B.txt",ios::trunc);
                              ofstream f6("ECE-C.txt",ios::trunc);
                              ofstream f7("EEE.txt",ios::trunc);
                              ofstream f8("EEE-A.txt",ios::trunc);
                              ofstream f9("EEE-B.txt",ios::trunc);
                              ofstream f10("MECH.txt",ios::trunc);
                              ofstream f11("MECH-A.txt",ios::trunc);
                              ofstream f12("MECH-B.txt",ios::trunc);
                              ofstream f13("IT.txt",ios::trunc);
                              ofstream f14("IT-A.txt",ios::trunc);
                              ofstream f15("IT-B.txt",ios::trunc);
                              ofstream f16("CSE.txt",ios::trunc);
                              ofstream f17("CSE-A.txt",ios::trunc);
                              ofstream f18("CSE-B.txt",ios::trunc);
                              ofstream f19("CSE-C.txt",ios::trunc);
                                   f1<<nnn;
                                   f1<<"\t"<<dd;
```

```
                                        f1<<"\t"<<ss;
                                        f1<<"\t"<<aa;
                                        f1<<"\t"<<mm;
                                        f1<<"\n";
                                        f1.close();
                                        f3.close();
                                        f4.close();
                                        f5.close();
                                        f6.close();
                                        f7.close();
                                        f8.close();
                                        f9.close();
                                        f10.close();
                                        f11.close();
                                        f12.close();
                                        f13.close();
                                        f14.close();
                                        f15.close();
                                        f16.close();
                                        f17.close();
                                        f18.close();
                                        f19.close();
                                        processece();
                                        processmech();
                                        processeee();
                                        processcse();
                                        processit();
                                }
};
class addteacher{
        protected:
                        string c,d,f;
                        long long int e;
                        long int g;
                public:
                        void addt(){
                                cout<<"\nEnter the name:";
                                cin>>c;
                                cout<<"\nEnter the department:";
                                cin>>d;
                                cout<<"\nEnter the mobile number:";
                                cin>>e;
                                cout<<"\nEnter the designation:";
                                cin>>f;
                                cout<<"\nEnter the id number:";
                                cin>>g;
                                ofstream f1("Teacher.txt",ios::app);
                                ofstream f2("teacherusername.txt",ios::app);
                                     f1<<c;
                                     f1<<"\t"<<d;
                                     f1<<"\t"<<e;
                                     f1<<"\t"<<f;
                                     f1<<"\t"<<g;
                                     f1<<"\n";
                                     f2<<g;
                                     f2<<"\t"<<e;
                                     f2<<"\n";
```

```
                                        f1.close();
                                        f2.close();
                        }
};
class studentlogin{
        protected:
                string abb[5000];
                string ab;
                string acc;
                string aa;
                string bb;
                string cc,dd,ee;
                int jj=1;
                public:
                        void login2(){
                                student:
                                cout<<"\nEnter user id:";
                                cin>>ab;
                                cout<<"\nEnter the password:";
                                cin>>acc;
                                ifstream f("student.txt");
                           int i=0;
                           while(!f.eof()){
                                 f>>abb[i];
                                  i++;
                        }
                        f.close();
                        int k=0;
                        for(int j=0;j<i;j++){
                                if(abb[j]==ab&&abb[j+1]==acc)
                                {
                                cout<<"Login Successful";
                                cout<<"\nYou have login as "<<abb[j-3];
                                cc=abb[j-3];
                                aa=abb[j-2];
                                bb=abb[j-1];
                                dd=abb[j];
                                ee=abb[j+1];
                                k++;
                                int n;
                                student1:
                                cout<<"\n1.View your details\n2.exit";
                                cout<<"\nPlease select your option:";
                                cin>>n;
                                switch(n){
                                        case 1:
                                                cout<<"\nName:"<<cc;
                                                cout<<"\nDepartment:"<<aa;
                                                cout<<"\nSection:"<<bb;
                                                cout<<"\nAdmission
Number:"<<dd;
                                                cout<<"\nMobile number:"<<ee;
                                                goto student1;
                                        case 2:
                                             cout<<"\n^^^^Thanks for
login^^^^";
                                        cout<<"\n~~~~GOOD BYE~~~~";
```

```
                                        break;
                                        default:
                                                cout<<"\n$$$$Invalid
choice$$$$";
                                    cout<<"\nPlease try again\n";
                                    goto student1;
                                }
                            }
                        }
                        if(k==0){
                                if(jj<3){
                                        cout<<"Username or password is
wrong";
                                    cout<<"\nPlease try again";
                                    jj++;
                                        goto student;
                                        }
                                        else{
                                                cout<<"You have reached the
limit of login attempts";
                                        }
                        }
                }
};
class teacherlogin:protected addstudent,marks,viewstudent{
        protected:
                string fg;
                string fgg;
                string abb[3000];
                int jj=1;
                public:
                        void login1(){
                                teacher:
                                cout<<"\nEnter user id:";
                                cin>>fgg;
                                cout<<"\nEnter the password:";
                                cin>>fg;
                                ifstream f("teacher.txt");
                           int ii=0;
                           while(!f.eof()){
                                 f>>abb[ii];
                                  ii++;
                        }
                        f.close();
                    int kkk=0;
                        for(int j=0;j<ii;j++){
                                if(abb[j]==fgg&&abb[j-2]==fg)
                                {
                                cout<<"Login Successful";
                                cout<<"\nYou have login as "<<abb[j-4];
                                kkk++;
                                teacher1:
                                int nn;
                                cout<<"\n1.Add student\n2.Update
Marks\n3.View marks\n4.view student details\n5.exit\n";
                                cout<<"\nPlease enter your choice";
                                cin>>nn;
```

```
                                switch(nn){
                                        case 1:
                                                adds();
                                                cout<<"\nPlease select any
other option";
                                                goto teacher1;
                                        case 2:
                                                mark();
                                                cout<<"\nPlease select any
other option";
                                                goto teacher1;
                                        case 3:
                                                mark2();
                                                cout<<"\nPlease select any
other option";
                                                goto teacher1;
                                        case 4:
                                                detailss();
                                                cout<<"\nPlease select any
other option";
                                                goto teacher1;
                                        case 5:
                                        cout<<"\n^^^^Thanks for login^^^^";
                                        cout<<"\n~~~~GOOD BYE~~~~";
                                        break;
                                        default:
                                                cout<<"\n$$$$Invalid
choice$$$$";
                                    cout<<"\nPlease try again\n";
                                    goto teacher1;
                                }
                            }
                        }
                        if(kkk==0){
                                if(jj<3){
                                        cout<<"Username or password is
wrong";
                                    cout<<"\nPlease try again";
                                    jj++;
                                        goto teacher;
                                        }
                                        else{
                                                cout<<"You have reached the
limit of login attempts";
                                        }
                        }
        }
};
class admin  : protected addteacher,viewstudent,markview{
        protected:
                string a[2],b[2];
                public:
                        void login(){
                           ifstream f("Admin.txt");
                           int i=0;
                           while(!f.eof()){
                                  f>>a[i];
```

```
                                i++;
                        }
                        f.close();
                        int j=1;
admin:
                        cout<<"\nEnter the username:";
                        cin>>b[0];
                        cout<<"\nEnter the password:";
                        cin>>b[1];
                        if(a[0]==b[0]&&b[1]==a[1]){
                                int n;
                                cout<<"Login Successful";
                                admin1:
                                cout<<"\n1.Add Teacher\n2.view student
details\n3.view mark\n4.exit";
                                cout<<"\nEnter your choice:";
                                cin>>n;
                                switch(n){
                                        case 1:
                                        addt();
                                        cout<<"\nSelect Other option:";
                                        goto admin1;
                                        case 2:
                                                detailss();
                                                cout<<"\nPlease select any
other option";
                                                goto admin1;
                                case 3:
                                        viewmark();
                                         cout<<"\nPlease select any other
option";
                                                 goto admin1;
                                        case 4:
                                        cout<<"\n^^^^Thanks for login^^^^";
                                        cout<<"\n~~~~GOOD BYE~~~~";
                                        break;
                                        default:
                                        cout<<"\n$$$$Invalid choice$$$$";
                                cout<<"\nPlease try again\n";
                                goto admin1;
                                }
                                }
                                else{
                                if(j<3){
                                        cout<<"Username or password is
wrong";
                                    cout<<"\nPlease try again";
                                    j++;
                                        goto admin;
                                        }
                                        else{
                                                cout<<"You have reached the
limit of login attempts";
                                        }
                        }
                }
};
```

```
int main(){
        int n;
        admin a;
        studentlogin s;
        teacherlogin t;
menu:
        cout<<"*******WELCOME TO JS COLLEGE********";
        cout<<"\n1.PRINCIPAL LOGIN\n2.TEACHER LOGIN\n3.STUDENT LOGIN";
        cout<<"\n\nPlease enter your choice: ";
        cin>>n;
        switch(n){
                case 1:
                        a.login();
                        break;
                case 2:
                        t.login1();
                        break;
                case 3:
                        s.login2();
                        break;
                default:
                        cout<<"\n$$$$Invalid choice$$$$";
                        cout<<"\nPlease try again\n";
                        goto menu;
        }
        }
```

OUTPUT:

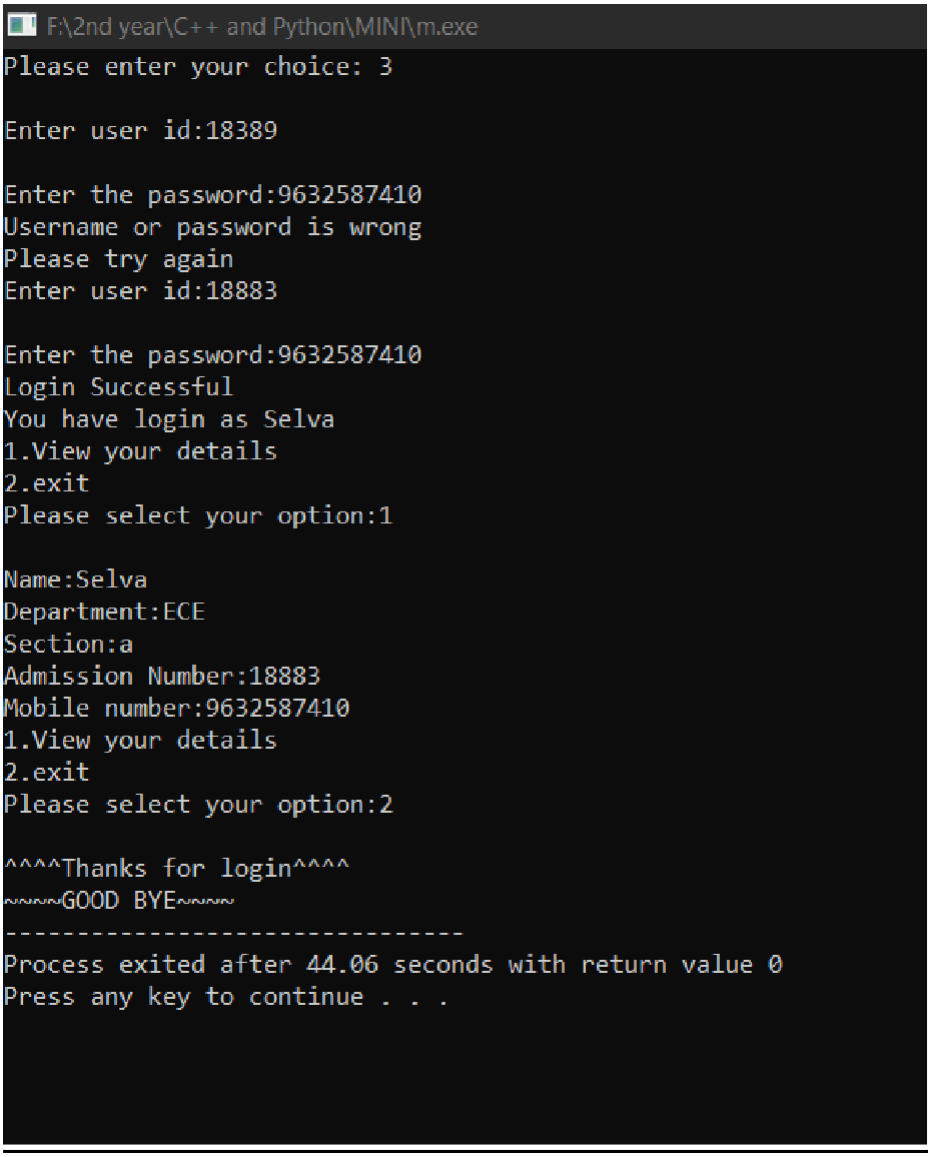
```
F:\2nd year\C++ and Python\MINI\m.exe
Enter the password:Selvaraj
Login Successful
1.Add Teacher
2.view student details
3.view mark
4.exit
Enter your choice:1

Enter the name:Jey

Enter the department:ECE

Enter the mobile number:9976719167

Enter the designation:Teacher

Enter the id number:18387

Select Other option:
1.Add Teacher
2.view student details
3.view mark
4.exit
Enter your choice:4

^^^^Thanks for login^^^^
~~~~GOOD BYE~~~~
--------------------------------
Process exited after 32.8 seconds with return value 0
```

Principal login output

```
F:\2nd year\C++ and Python\MINI\m.exe
*******WELCOME TO JS COLLEGE********
1.PRINCIPAL LOGIN
2.TEACHER LOGIN
3.STUDENT LOGIN

Please enter your choice: 2

Enter user id:18387

Enter the password:9976719167
Login Successful
You have login as Jey
1.Add student
2.Update Marks
3.View marks
4.view student details
5.exit

Please enter your choice1

Enter the name:Selva

Enter the department:ece

Enter the section:a

Enter the admission number:18388

Enter the mobile number:9632587410

Please select any other option
1.Add student
2.Update Marks
3.View marks
4.view student details
5.exit

Please enter your choice2
Enter the exam name:cat
Enter the class:ece
Enter the section:a
Enter the number of subjects:4
Enter the marks for  Selva
Enter the marks for subject 1:36

Enter the marks for subject 2:96

Enter the marks for subject 3:45

Enter the marks for subject 4:78
```

Teacher login output

```
F:\2nd year\C++ and Python\MINI\m.exe
*******WELCOME TO JS COLLEGE********
1.PRINCIPAL LOGIN
2.TEACHER LOGIN
3.STUDENT LOGIN

Please enter your choice: 2

Enter user id:18387

Enter the password:9976719167
Login Successful
You have login as Jey
1.Add student
2.Update Marks
3.View marks
4.view student details
5.exit

Please enter your choice3

Enter the exam name:cat

Enter the class:ece

Enter the section:a
Selva   36      96      45      78


Please select any other option
1.Add student
2.Update Marks
3.View marks
4.view student details
5.exit

Please enter your choice5

^^^^Thanks for login^^^^
~~~~GOOD BYE~~~~
--------------------------------
Process exited after 25.11 seconds with return value 0
Press any key to continue . . .
```



STUDENT LOGIN OUTPUT