

SILVER DOLLAR CLUB



Project by:

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XII E

St. Columba's School

CBSE Roll no.: _____

Aim

To encourage students to take part in extra-curricular activities.

CERTIFICATE

This is to certify that
SOURISH DAS of class XII E
has made this project titled
SILVER DOLLARS CLUB
under our supervision
and has completed the project
to our satisfaction.

Mrs. Nagpal
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Mr. Fernandes
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ACKNOWLEDGEMENT

I would like to express
my heartfelt thanks and gratitude to
Mrs. Nagpal and Mr. Fernandes
for supporting me to undertake this interesting project
and helping me
in the successful completion of the same.

LIST OF HEADER FILES USED

Name of header file	Functions used
fstream.h	<ul style="list-style-type: none">❖ Includes definitions for stream classes <i>fstream</i>, <i>ifstream</i> & <i>ofstream</i>.❖ Also includes functions <i>open</i>, <i>write</i>, <i>read</i> & <i>close</i> used for operations on binary and text files.
conio.h	<ul style="list-style-type: none">• getch()• clrscr() : clearing screen• gotoxy : place the text on various locations on output screen.
stdio.h	gets : for inputting strings into program
process.h	exit(0) : for exiting program
string.h	<ul style="list-style-type: none">❖ strcmp: for checking password; case sensitive comparison❖ strcmpi: for comparing 2 separate cases irrespective of case.❖ strcpy: for copying one string into the another; used in modification & addition functions

LIST OF FUNCTIONS USED

Function name	Use
void addnew()	To add data for each member
void leaveclub()	To delete the record for a member
void modify_details()	To make changes in details of club members
void search_name()	To search on the basis of name
void search_cid()	To search on the basis of club id
void search_cname()	To search on the basis of activity
void show_all()	To display all the members
void boundary()	Give a designed boundary to each page of program
void border()	Give a designed border for various pages of program
void home()	For providing a homescreen to the program

CLASS DEFINITION

```
class club
{
    private:
        int cid, cls;
        char name[60], clubname[40];
    public:
        char *retname();
        int retid();
        char *retcname();
        int retcls();
        void getdata();
        void putdata(int row);
        void change_name(char tname[]);
        void change_cls(int tcls);
        void change_cname(char tcname[]);
};
club c, c1, c2;
```

SOURCE CODES


```

#include<fstream.h>
#include<conio.h>
#include<stdio.h>
#include<string.h>
#include<process.h>
#include<dos.h>
void border();
void boundary();
void home();
void addnew();
void leaveclub();
void modify_details();
void search_cid();
void search_cname();
void search_name();
void show_all();
//-----//
void border()
{
    int x,y;
    for(x=0;x<=39;x++)
    {
        gotoxy(2*x+1,1);cout<<"-";
        gotoxy(2*x+1,24);cout<<"-";
    }
    for(y=0;y<=11;y++)
    {
        gotoxy(1,2*y+1);cout<<"-";
        gotoxy(1,2*y+2);cout<<"-";
        gotoxy(79,2*y+1);cout<<"-";
        gotoxy(79,2*y+2);cout<<"-";
    }
}
void boundary()
{
    int i,j;
    for(i=1;i<=24;++i)
    {
        gotoxy(1,i);cout<<(char)177;
        gotoxy(2,i);cout<<"-";
        gotoxy(3,i);cout<<(char)177;
        gotoxy(78,i);cout<<(char)177;
        gotoxy(79,i);cout<<"";
    }
}

```

```

        gotoxy(80,i);cout<<(char)177;
    }
    for(j=1;j<=80;++j)
    {
        gotoxy(j,1);cout<<(char)177;
        gotoxy(j,2);cout<<"*";
        gotoxy(j,3);cout<<(char)177;
        gotoxy(j,22);cout<<(char)177;
        gotoxy(j,23);cout<<"*";
        gotoxy(j,24);cout<<(char)177;
    }
}

void home()
{
    clrscr();
    gotoxy(1,1);cout<<"
    gotoxy(1,2);cout<<"
    gotoxy(1,3);cout<<"
    gotoxy(1,4);cout<<"
    gotoxy(1,5);cout<<"      000
    gotoxy(1,6);cout<<"*      00000      *
    gotoxy(1,7);cout<<" **      00000      **
    gotoxy(1,8);cout<<" ****      000      ****
    gotoxy(1,9);cout<<" *****      *****
    gotoxy(1,10);cout<<" *****
    gotoxy(1,11);cout<<" *****      # Silver Dollars #      *****
    gotoxy(1,12);cout<<" *****Unleash the Uniqueness in you!!! *****
    gotoxy(1,13);cout<<" *****
    gotoxy(1,14);cout<<" *****
    gotoxy(1,15);cout<<" *****
    gotoxy(1,16);cout<<" *****      000      *****
    gotoxy(1,17);cout<<" *****      00000      *****
    gotoxy(1,18);cout<<" ***      00000      ***
    gotoxy(1,19);cout<<" **      *      *      000      **
    gotoxy(1,20);cout<<" *
    gotoxy(1,21);cout<<"
    gotoxy(30,24);cout<<"Press ENTER to continue ";
    getch();
}

```

```

//-----Class Definition-----//
class club
{
    private:
        int cid, cls;
        char name[60], clubname[40];
    public:
        char *retname()
        { return name; }
        int retid()
        { return cid; }
        char *retcname()
        { return clubname; }
        int retcls()
        { return cls; }
        void getdata()
        {
            gotoxy(5,5);cout<<"Enter club id : ";cin>>cid;
            gotoxy(5,6);cout<<"Enter name : "; gets(name);
            gotoxy(5,7);cout<<"Enter class : "; cin>>cls;
            gotoxy(5,8);cout<<"Enter club name : "; gets(clubname);
        }
        void putdata(int row);
        void change_name(char tname[])
        { strcpy(name,tname); }
        void change_cls(int tcls)
        { cls=tcls; }
        void change_cname(char tcname[])
        { strcpy(clubname,tcname); }
}; club c;
void club::putdata(int row)
{
    border();
    for(int i=3;i<22;i++)
    {
        gotoxy(22,i);cout<<char(177);
        gotoxy(41,i);cout<<char(177);
        gotoxy(55,i);cout<<char(177);
    }
    gotoxy(7,4);cout<<"CLUB ID";
    gotoxy(30,4);cout<<"NAME";
    gotoxy(43,4);cout<<"CLASS";
    gotoxy(58,4);cout<<"CLUB NAME";
}

```

```

        gotoxy(3,5);cout<<"=====";
        gotoxy(5,row);cout<<cid;
        gotoxy(27,row);cout<<name;
        gotoxy(45,row);cout<<cls;
        gotoxy(60,row);cout<<clubname;
    }
    //-----//
void addnew()
{
    fstream fin,fin1; club c2;
    char ch='y'; int found;
    fin.open("Member.dat",ios::in|ios::binary);
    while(ch=='y' || ch=='Y')
    {
        clrscr(); border();
        c.getdata();
        while(fin)
        {
            found=0;
            fin.read((char*)&c2,sizeof(c2));
            if(fin.eof())
                break;
            else if(c2.retid() == c.retid())
            {
                gotoxy(8,15);cout<<"Sorry, the club id already exists!! Please try again.";
                found=1;
                getch();
                break;
            }
        }
        fin.close();
        if(found==0)
        {
            fin1.open("Member.dat",ios::app|ios::binary);
            fin1.write((char*)&c,sizeof(c));
            gotoxy(8,14);cout<<"New member added successfully!!";
            fin1.close();
        }
        gotoxy(8,16);cout<<"Do you want to add more ? (y/n) : ";
        cin>>ch;
    }
    getch();
    int l,j,i=0;

```

```

club arr[20];
fstream f1;
f1.open("Member.dat",ios::in|ios::binary);
while(f1)
{
    f1.read((char*)&arr[i],sizeof(c));
    if(f1.eof())
        break;
    ++i;
}
f1.close();
club c1;
for(l=0;l<(i-1);++l)
{
    for(j=0;j<(i-l-1);++j)
    {
        if(arr[j].retid()>arr[j+1].retid())
        {
            c1=arr[j];
            arr[j]=arr[j+1];
            arr[j+1]=c1;
        }
    }
}
ofstream f;
f.open("Member.dat",ios::binary);
for(int k=0;k<i;++k)
    f.write((char*)&arr[k],sizeof(c1));
f.close();
}
void leaveclub()
{
    clrscr(); border();
    ifstream fin("Member.dat", ios::in|ios::binary);
    ofstream fout("Member2.dat", ios::out|ios::binary);
    int tclubid, found=0;
    gotoxy(5,6);cout<<"Enter the club id of the person leaving = ";
    cin>>tclubid;
    while(fin)
    {
        fin.read((char*)&c, sizeof(c));
        if(fin.eof())
            break;
    }
}

```

```

        if(c.retid()==tclubid)
            found=1;
        else
            fout.write((char*)&c, sizeof(c));
    }
    if(found==0)
    {
        gotoxy(5,18);cout<<"Record not found!!";
    }
    else
    {
        gotoxy(5,18);cout<<"Record deleted successfully!!";
    }
    fin.close();
    fout.close();
    remove("Member.dat");
    rename("Member2.dat","Member.dat");
    getch();
}
void modify_details()
{
    clrscr(); boundary();
    fstream f;
    f.open("Member.dat",ios::in|ios::out|ios::binary);
    int tcls,tid, found=0, row=6, ch=0, tt=0;
    char tname[60],tname[60];
    gotoxy(5,6);cout<<"Please enter the club ID : ";
    cin>>tid;
    clrscr();
    while(f)
    {
        f.read((char*)&c,sizeof(c));
        tt++;
        if(f.eof())

            break;
        if(c.retid()==tid)
        {
            found=1;
            c.putdata(row);
            getch();
            break;
        }
    }
}

```

```

}
if(found==0)
    { gotoxy(7,20);cout<<"Sorry, no record found!!"; return;}
while(ch!=4)
{
    clrscr(); border();
    gotoxy(5,7);cout<<"What do you wish to edit in here?";
    gotoxy(6,9);cout<<"1. Name";
    gotoxy(6,10);cout<<"2. Class";
    gotoxy(6,11);cout<<"3. Club Name";
    gotoxy(6,12);cout<<"4. Exit to Main menu";
    gotoxy(5,13);cout<<"Enter your choice here : "; cin>>ch;
    switch(ch)
    {
        case 1 : clrscr(); border();
            gotoxy(6,6);cout<<"Enter the new name : ";
            gets(tname);
            c.change_name(tname);
            f.seekp(((tt-1)*sizeof(c)),ios::beg);
            f.write((char*)&c,sizeof(c));
            gotoxy(5,10);cout<<"Name changed successfully!!";
            getch();
            break;
        case 2 : clrscr(); border();
            gotoxy(6,6);cout<<"Enter the new class : ";
            cin>>tcls;
            c.change_cls(tcls);
            f.seekp(((tt-1)*sizeof(c)),ios::beg);
            f.write((char*)&c,sizeof(c));
            gotoxy(5,10);cout<<"Class updated successfully!!";
            getch();
            break;
        case 3 : clrscr(); border();
            gotoxy(6,6);cout<<"Enter the new club name : ";
            gets(tcname);
            c.change_cname(tcname);
            f.seekp(((tt-1)*sizeof(c)),ios::beg);
            f.write((char*)&c,sizeof(c));
            gotoxy(5,10);cout<<"Club name modified successfully!!";
            getch();
            break;
    }
}
}

```

```

        f.close();
        getch();
    }
    void search_name()
    {
        clrscr(); border();
        ifstream f;
        char sname[10]; int found=0, row=6;
        gotoxy(5,5);cout<<"Enter name of the member to be searched :";
        gets(sname);
        f.open("Member.dat",ios::in|ios::binary);
        while(f)
        {
            f.read((char*)&c,sizeof(c));
            if(f.eof())
                break;
            else if(strcmpi(sname,c.retname())==0)
            {
                found=1;
                c.putdata(row);
                row=row+2;
                if(row==20)
                {
                    gotoxy(6,23);cout<<"Press Enter to continue to next page.";
                    clrscr();
                    row=6;
                    getch();
                }
            }
        }
        if(found==0)
        {
            gotoxy(6,13);cout<<"Sorry no record found!!!";
        }
        f.close();
        getch();
    }
    void search_cid()
    {
        clrscr(); border();
        ifstream f;
        int tcid, found=0,row=6;

```



```

gotoxy(5,5);cout<<"Enter Club ID : ";
cin>>tcid;
f.open("Member.dat",ios::in|ios::binary);
while(f)
{
    f.read((char*)&c,sizeof(c));
    if(f.eof())
        break;
    else if(c.retid()==tcid)
    {
        found=1;
        c.putdata(row);
        row=row+2;
        if(row==22)
        {
            clrscr();
            row=6;
            getch();
        }
    }
}
f.close();
if(found==0)
{ gotoxy(6,13);cout<<"Sorry no record found!!!"; }
getch();
}

void search_cname()
{
    clrscr(); border(); ifstream f;
    char tcname[40]; int found=0, row=6;
    gotoxy(3,4);cout<<"Enter the club name of the person : ";
    gets(tcname);
    clrscr();
    f.open("Member.dat",ios::in|ios::binary);
    while(f)
    {
        f.read((char*)&c,sizeof(c));
        if(f.eof())
            break;
        else if(strcmpi(tcname,c.retcname())==0)
        {
            found=1;
            c.putdata(row);

```

```

        row=row+2;
        if(row==23)
        {
            gotoxy(6,23);cout<<"Press Enter to continue to next page.";
            clrscr();
            row=6;
            getch();
        }
    }
}
f.close();
if(found==0)
{ gotoxy(6,13);cout<<"Sorry no record found in club "<<tcname;    }
getch();
}
void show_all()
{
    clrscr(); border();
    int x,y,z,row=6; ifstream f;
    f.open("Member.dat",ios::binary);
    while(f)
    {
        f.read((char*)&c,sizeof(c));
        if(f.eof())
            break;
        c.putdata(row);
        row=row+2;
        if(row==22)
        {
            gotoxy(6,23);cout<<"Press Enter to continue to next page.";
            getch();
            clrscr();
            row=6;
        }
    }
    f.close();
    f.open("member.dat",ios::in);
    f.seekg(0,ios::end);
    x=f.tellg();
    y=sizeof(c); z=x/y;
    gotoxy(5,23);cout<<"Total no. of records : "<<z;
    f.close();
    getch();
}

```

```
//-----Main function-----//
void main()
{
    clrscr();home();
    clrscr();boundary();
    int ch=0;
    char pwd[13]={0},temp; int i=0;
    gotoxy(16,12);cout<<"ENTER PASSWORD : ";
    while((temp=getch())!=13)
    {
        pwd[i++]=temp;
        cout<<"*";
    }
    if(strcmp(pwd,"sahnidas98")==0)
    {
        gotoxy(15,15);cout<<"Access granted !!!";
        getch();
    }
    else
    {
        gotoxy(15,15);cout<<"Password wrong!!! Exiting...";
        getch(); exit(0);
    }
    while(ch!=6)
    {
        clrscr(); boundary();
        gotoxy(21,6);cout<<"WELCOME TO SILVER DOLLAR CLUB !!!";
        gotoxy(20,8);cout<<"Please choose from the following options :- ";
        gotoxy(25,11);cout<<"1. Add new member";
        gotoxy(25,12);cout<<"2. Search the clubs";
        gotoxy(25,13);cout<<"3. Modify details";
        gotoxy(25,14);cout<<"4. Delete record";
        gotoxy(25,15);cout<<"5. Show records";
        gotoxy(25,16);cout<<"6. Exit";
        gotoxy(27,19);cout<<"Enter choice = ";cin>>ch;
        switch(ch)
        {
            case 1 : addnew();
                    break;
            case 2 : int s=0;
                    while(s!=4)
                    {
```

```

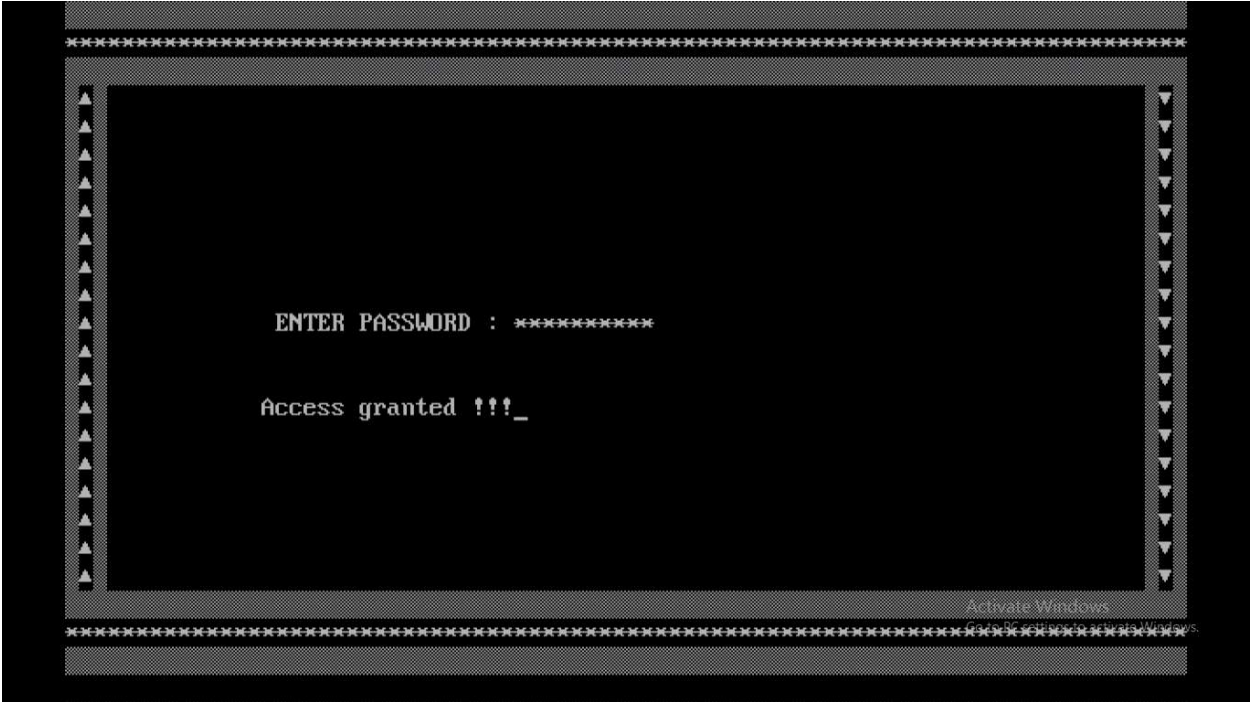
        clrscr(); boundary();
gotoxy(17,6);cout<<"Search on the basis of following: -";
gotoxy(22,8);cout<<"1. Search by Name";
gotoxy(22,10);cout<<"2. Search by Club Name";
gotoxy(22,12);cout<<"3. Search by Club ID";
gotoxy(22,14);cout<<"4. Exit Search menu";
gotoxy(22,16);cout<<"Enter choice : ";cin>>s;
switch(s)
{
    case 1 : search_name();
    break;
    case 2 : search_cname();
    break;
    case 3 : search_cid();
    break;
}
}
break;
case 3 : modify_details();
break;
case 4 : leaveclub();
break;
case 5 : show_all();
break;
case 6 : exit(0);
}

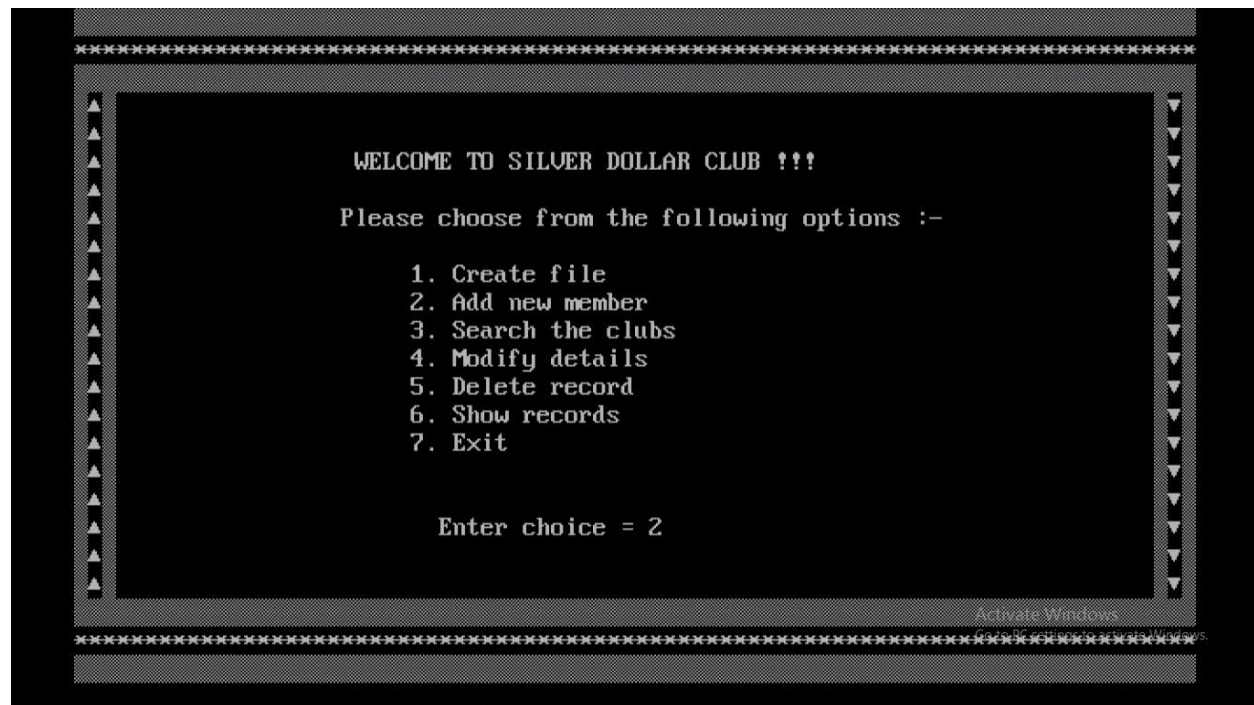
}

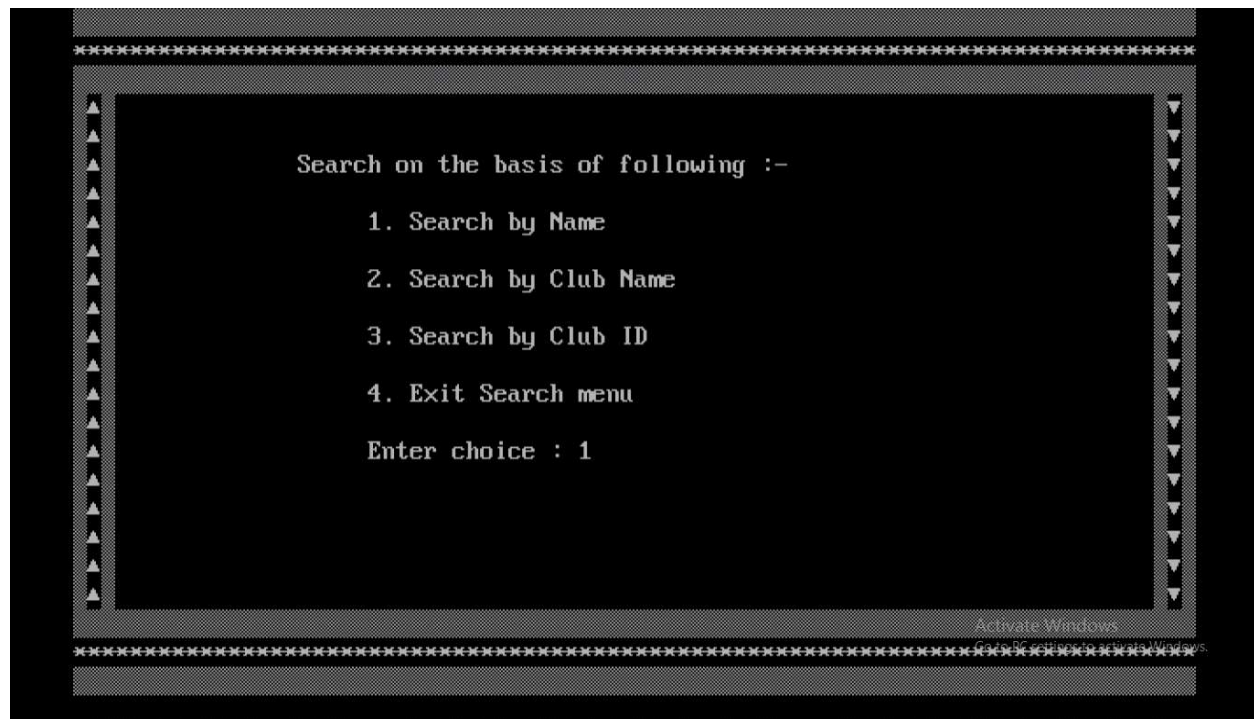
}
//-----T H E---E N D-----//

```

OUTPUT SCREENS







CLUB ID	NAME	CLASS	CLUB NAME
1	Sourish	12	Arts

Activate Windows
Go to PC settings to activate Windows.

Please enter the club ID : 1

Activate Windows
Go to PC settings to activate Windows.



BIBLIOGRAPHY

- Class notes
- *Together with*® Computer Science (C++) with solution
- Computer Science with C++ : Sumita Arora
- The C++ Programming Language *Third Edition* : Bjarne Stroustrup
- www.ascii-codes.com
- www.youtube.com (for video tutorials)
- www.cplusplus.com