#include<iostream>

#include<windows.h>

#include<fstream>

#include<string>

using namespace std;

fstream f;

class col

{

string cName;

int colRank;

int data[4];

int bRank[4];

int n;

col \*next;

public:

col()

{

n=0;

}

friend class collegesList;

};

class collegesList

{

string branch[4];

col \*first;

col \*last;

public:

collegesList()

{

branch[0]="CSC";

branch[1]="IT";

branch[2]="ECE";

branch[3]="EEE";

first=NULL;

last=NULL;

}

void insertEnd(string ,int ,int br[4] );

void selectBranch(col &);

void displayList();

void collegeAlloted(int );

};

void collegesList::insertEnd(string c,int r,int br[4])

{

col \*t=new col;

t->cName=c;

t->colRank=r;

for(int i=0;i<4;i++)

{

t->bRank[i]=br[i];

}

selectBranch(\*t);

if(first==NULL)

{

first=t;

last=t;

first->next=NULL;

return;

}

else if(first->next==NULL)

{

first->next=t;

t->next=NULL;

last=t;

return;

}

else

{

last->next=t;

last=t;

last->next=NULL;

return;

}

}

void collegesList::selectBranch(col &c)

{

HANDLE color=GetStdHandle(STD\_OUTPUT\_HANDLE);

SetConsoleTextAttribute(color, 3);

cout<<"\n\t\t1.CSC";

cout<<"\n\t\t2.IT";

cout<<"\n\t\t3.ECE";

cout<<"\n\t\t4.EEE";

cout<<"\n\t\t-------Select your preference branch in your order.\n\t\t--------Maximum of 4 branches you are allowed to put.\n\t\t--------Press zero and enter to End of options\n ";

for(int i=0;i<4;i++)

{

int l;

cout<<"\nSelect preference "<<i+1<<"-";

cin>>l;

if(l==0)

return;

c.data[i]=l;

c.n=c.n+1;

}

}

void collegesList::collegeAlloted(int r)

{

if(first==NULL)

return;

col \*temp=first;

if(r<10000)

{

while(temp!=NULL)

{

if(r<temp->colRank)

{

for(int i=0;i<4;i++)

{

int b=temp->data[i];

if(r<temp->bRank[b-1])

{

f>>temp->cName>>branch[b-1];

cout<<"\n\t\t\t===============================================";

cout<<"\n\t\t\tThe Alloted College is '"<<temp->cName<<"'of Branch '"<<branch[b-1]<<"'";

cout<<"\n\t\t\t===============================================";

\_exit(0);

}

}

}

temp=temp->next;

}

if(temp==NULL)

cout<<"\n\t\tYou are not Eligible for the colleges you have kept ";

}

}

void collegesList::displayList()

{

if(first==NULL)

{

cout<<"\n\t\tYOUR COLLEGES PREFERENCE LIST IS EMPTY\nPLEASE SELECT OPTIONS ";

return;

}

else

{

cout<<"\t\t\t===============================================";

cout<<"\n\t\t\t\t-------OPTIONS FREEZED--------";

cout<<"\n\t\t\t===============================================";

cout<<"\n\t\t\tCOLLEGE\_NAME\tBRANCH1\tBRANCH2\tBRANCH3\tBRANCH4\n\t\t\t";

col \*temp=first;

while(temp!=NULL)

{

cout<<temp->cName<<"\t";

for(int i=0;i<temp->n;i++)

{

int j=temp->data[i];

cout<<branch[j-1]<<"\t";

}

temp=temp->next;

cout<<"\n\t\t\t";

}

cout<<"\n\t\t\t===============================================";

}

}

int main()

{

HANDLE color=GetStdHandle(STD\_OUTPUT\_HANDLE);

f.open("data.cpp",ios\_base::in|ios\_base::out);

system("Color 74");

SetConsoleTextAttribute(color, 64);

cout<<"\n\n\n\n\t\t\t\t------------TELANGANA EAMCET WEB COUNSELLING-------------\n\t\t\t\t\t\t -------WELCOME-------\n";

collegesList c;

string s;

int bR[4];

int Rank;

int Eroll;

cout<<"\n\t\t\tEnter Your 4 digit Eamcet RollNumber- ";

SetConsoleTextAttribute(color, 3);

cin>>Eroll;

SetConsoleTextAttribute(color, 64);

cout<<"\t\t\tStudent RANK in Eamcet- ";

SetConsoleTextAttribute(color, 3);

cin>>Rank;

f>>Rank>>Eroll;

int k;

int bR1[]={140,230,350,500};

int bR2[]={300,500,700,1000};

int bR3[]={500,800,1200,1500};

int bR4[]={700,1200,1600,2000};

int bR5[]={900,2000,2500,3000};

int bR6[]={1000,2000,3000,4000};

int bR7[]={1500,2500,4000,5000};

int bR8[]={2000,4000,5500,6000};

int bR9[]={2500,4500,6000,7000};

int bR10[]={3000,6000,7000,8000};

int bR11[]={3500,6500,7500,9000};

int bR12[]={4000,7000,8500,10000};

while(1)

{

SetConsoleTextAttribute(color, 63);

cout<<"\t\t-----------LIST OF COLLEGES------------------------";

cout<<"\n\t\t\t1.OU \n\t\t\t2.CBIT ";

cout<<"\n\t\t\t3.VASV ";

cout<<"\n\t\t\t4.VNR \n\t\t\t5.SNIST ";

cout<<"\n\t\t\t6.GRRR ";

cout<<"\n\t\t\t7.BVRIT ";

cout<<"\n\t\t\t8.KMIT ";

cout<<"\n\t\t\t9.KITS ";

cout<<"\n\t\t\t10.CVSR ";

cout<<"\n\t\t\t11.MVSR \n\t\t\t12.MGIT ";

cout<<"\n\t\t\t13.END OF SELECTING COLLEGES ";

cout<<"\n\t\tSelect- ";

SetConsoleTextAttribute(color, 3);

cin>>k;

switch(k)

{

case 1:

s="OU\_colllege";

c.insertEnd(s,500,bR1);

break;

case 2:

s="CBIT\_college";

c.insertEnd(s,1000,bR2);

break;

case 3:

s="VASV\_colege";

c.insertEnd(s,1500,bR3);

break;

case 4:

s="VNR\_colege";

c.insertEnd(s,2000,bR4);

break;

case 5:

s="SNIST\_colege";

c.insertEnd(s,3000,bR5);

break;

case 6:

s="GRRR\_college";

c.insertEnd(s,4000,bR6);

break;

case 7:

s="BVRIT\_colege";

c.insertEnd(s,5000,bR7);

break;

case 8:

s="KMIT\_colege";

c.insertEnd(s,6000,bR8);

break;

case 9:

s="KITS\_colege";

c.insertEnd(s,7000,bR9);

break;

case 10:

s="CVSR\_college";

c.insertEnd(s,8000,bR10);

break;

case 11:

s="MVSR\_colege";

c.insertEnd(s,9000,bR11);

break;

case 12:

s="MGIT\_colege";

c.insertEnd(s,10000,bR12);

break;

case 13:

c.displayList();

c.collegeAlloted(Rank);

break;

}

}

return 0;

}