//TIHAR JAIL MANAGEMENT

#include<iostream.h>

#include<conio.h>

#include<string.h>

#include<stdio.h>

#include<ctype.h>

#include<process.h>

int password() //PASSWORD FUNCTION

{

char ch[25]=" ";

int i=0,b=0;

while(1)

{

ch[i]=getch();

if(ch[i]!=8&&ch[i]!=13)

{

cout<<"\*";

i++;

}

else if(ch[i]==13)

break;

else if(ch[i]==8)

{

cout<<"\b";

clreol();

ch[i]='~';

i--;

}

}

ch[i]=NULL;

for(i=0;ch[i]!=NULL;i++)

{

if(ch[i]=='~')

{

for(int j=i;ch[i]!=NULL;j++)

ch[j]=ch[j+1];

i++;

}

}

if(strcmp(ch,"hello")==0)

b=1;

return b;

}

int n,n2,dat[25];

struct date //STRUCTURE OF DATE

{

int year,mon,day;

}d2;

struct info //STORING PRISONER DETAILS

{

int pno;

char pname[25],fname[25];

int age;

date d1,d3;

char crime[30];

};

void input(info a[],int n) //INPUT DETAILS

{

int x=8;

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

{

gotoxy(1,x);

cin>>a[i].pno;

gotoxy(12,x);

gets(a[i].pname);

gotoxy(23,x);

gets(a[i].fname);

gotoxy(43,x);

cin>>a[i].d1.day;

gotoxy(45,x);

cout<<"/";

gotoxy(46,x);

cin>>a[i].d1.mon;

gotoxy(48,x);

cout<<"/";

gotoxy(49,x);

cin>>a[i].d1.year;

gotoxy(56,x);

cin>>a[i].age;

gotoxy(66,x);

gets(a[i].crime);

x++;

}

}

void output(info a2[],int n) //DISPLAY INFORMATION

{

int x=7;

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

{

gotoxy(1,x);

cout<<a2[i].pno;

gotoxy(12,x);

cout<<a2[i].pname;

gotoxy(23,x);

cout<<a2[i].fname;

gotoxy(43,x);

cout<<a2[i].d1.day<<"/"<<a2[i].d1.mon<<"/"<<a2[i].d1.year;

gotoxy(56,x);

cout<<a2[i].age;

gotoxy(64,x);

cout<<a2[i].crime;

x++;

}

}

void output2(info a2[],int n)

{

int x=7;

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

{

gotoxy(1,x);

cout<<a2[i].pno;

gotoxy(12,x);

cout<<a2[i].pname;

gotoxy(23,x);

cout<<a2[i].fname;

gotoxy(43,x);

cout<<a2[i].d1.day<<"/"<<a2[i].d1.mon<<"/"<<a2[i].d1.year;

gotoxy(53,x);

cout<<a2[i].d3.day<<"/"<<a2[i].d3.mon<<"/"<<a2[i].d3.year;

gotoxy(63,x);

cout<<a2[i].age;

gotoxy(69,x);

cout<<a2[i].crime;

x++;

}

}

int search1(info a[],int n,char str[]) //SEARCH FOR A PRISONER

{

int flag=-1;

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

{

if(strcmpi(a[i].pname,str)==0)

{

flag=i;

break;

}

}

return flag;

}

int search2(info a[],int n,date d2) //CHECKING THE DATE

{

int k=0;

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

{

if(a[i].d3.year==d2.year)

{

if(a[i].d3.mon==d2.mon)

{

if(a[i].d3.day==d2.day)

{

dat[k]=i;

k++;

}

}

}

}

return k;

}

void modout(int m,info a[]) //DISPLAY CHANGED INFORMATION

{

gotoxy(1,10);

cout<<"PRISONER";

gotoxy(3,11);

cout<<"NO";

gotoxy(12,10);

cout<<"NAME";

gotoxy(23,10);

cout<<"FATHER'S NAME";

gotoxy(43,10);

cout<<"ADM. DATE";

gotoxy(56,10);

cout<<"AGE";

gotoxy(64,10);

cout<<"CASE DETAILS";

gotoxy(1,13);

cout<<a[m].pno;

gotoxy(12,13);

cout<<a[m].pname;

gotoxy(23,13);

cout<<a[m].fname;

gotoxy(43,13);

cout<<a[m].d1.day<<"/"<<a[m].d1.mon<<"/"<<a[m].d1.year;

gotoxy(56,13);

cout<<a[m].age;

gotoxy(64,13);

cout<<a[m].crime;

}

void modify(info a[],int n) //MODIFY

{

int ch,m,i,temp;

char str[25];

cout<<"\t\t\tMAIN MENU\n\n"

<<" 1. Change the name"

<<"\t2. Change the age"

<<"\t3. Change father's name"

<<"\n\nenter choice=";

cin>>ch;

switch(ch)

{

case 1: cout<<"Enter the incorrect prisoner name="; //CHANGE PRISONER NAME

gets(str);

m=search1(a,n,str);

if(m!=-1)

{

cout<<"enter correct name=";

gets(a[m].pname);

cout<<endl;

modout(m,a);

}

else

{

cout<<"\nname does not exist..";

}

break;

case 2: cout<<"enter the prisoner name:"; //CHANGE AGE

gets(str);

m=search1(a,n,str);

if(m!=-1)

{

cout<<"incorrect age="<<a[m].age<<endl;

cout<<"enter correct age=";

cin>>a[m].age;

modout(m,a);

}

else

{

cout<<"\nname does not exist..";

}

break;

case 3: cout<<"Enter the prisoner name="; //CHANGE FATHER'S NAME

gets(str);

m=search1(a,n,str);

if(m!=-1)

{

cout<<"incorrect father's name="<<a[m].fname<<endl;

cout<<"enter correct father's name=";

gets(a[m].fname);

cout<<endl;

modout(m,a);

}

else

{

cout<<"\nname does not exist..";

}

break;

}

}

void main()

{

clrscr();

info a[20],a2[20];

int b=0,flag=0,m,t,z;

int ch;

char str[20],prison[20];

date d2,d3;

while(b!=1)

{

clrscr();

cout<<"\n\n\n\n\n\n\n\t\tEnter password:";

b=password();

if(b==1)

{

while(1)

{

clrscr();

cout<<"\t\tWELCOME TO TIHAR PRISONS\n\n" //MAIN MENU

<<"\t1. Input Record\n"

<<"\t2. Display the List Of The Prisoners\n"

<<"\t3. Search a Prisoner\n"

<<"\t4. Change the record\n"

<<"\t5. Input the Prisoner Released\n"

<<"\t6. List of the prisoner Released\n"

<<"\t7. Prisoners released on a particular date\n"

<<"\t8. Exit"

<<"\t\t\n\nEnter Your Choice=";

cin>>ch;

switch(ch)

{

case 1: clrscr();

cout<<"Enter the number of records=";

cin>>n;

flag=1;

gotoxy(1,4);

cout<<"PRISONER";

gotoxy(3,5);

cout<<"NO";

gotoxy(12,4);

cout<<"NAME";

gotoxy(23,4);

cout<<"FATHER'S NAME";

gotoxy(43,4);

cout<<"ADM. DATE";

gotoxy(56,4);

cout<<"AGE";

gotoxy(64,4);

cout<<"CASE DETAILS";

input(a,n); //calling function

getch();

break;

case 2: clrscr();

if(flag==1)

{

gotoxy(1,4);

cout<<"PRISONER";

gotoxy(3,5);

cout<<"NO";

gotoxy(12,4);

cout<<"NAME";

gotoxy(23,4);

cout<<"FATHER'S NAME";

gotoxy(43,4);

cout<<"ADM. DATE";

gotoxy(56,4);

cout<<"AGE";

gotoxy(64,4);

cout<<"CASE DETAILS";

output(a,n);

}

else

cout<<"\n\nNo records found... india is free from criminals...please enter it";

getch();

break;

case 3: clrscr();

if(flag==1) //searching

{

cout<<"Enter the name to be searched=";

gets(str);

m=search1(a,n,str);

if(m==-1)

{

cout<<"no records found";

}

else

{

clrscr();

int i;

cout<<"PRISONER NO:"<<a[m].pno<<endl

<<"NAME:"<<a[m].pname<<endl

<<"FATHER'S NAME:"<<a[m].fname<<endl

<<"ADM. DATE:"<<a[m].d1.day<<"/"<<a[m].d1.mon<<"/"<<a[m].d1.year<<endl

<<"AGE:"<<a[m].age<<endl

<<"CASE DETAILS:"<<a[m].crime;

}

}

else

cout<<"first input records";

getch();

break;

case 4: clrscr(); //modifications

modify(a,n);

getch();

break;

case 5: clrscr();

n2=0;

int y=4;

if(flag==1) //prisoner released

{

cout<<"Enter number of prisoners released=";

cin>>t;

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

{

cout<<"Name "<<i+1<<"=";

gets(prison);

m=search1(a,n,prison);

if(m!=-1)

{

a2[i]=a[m];

for(int j=m;j<n;j++)

{

a[j]=a[j+1];

}

cout<<endl<<prison<<" released on=";

gotoxy(30,y);

cin>>a2[i].d3.day;

gotoxy(32,y);

cout<<"/";

gotoxy(33,y);

cin>>a2[i].d3.mon;

gotoxy(35,y);

cout<<"/";

gotoxy(36,y);

cin>>a2[i].d3.year;

n--;

y+=4;

cout<<endl;

}

else

{

cout<<"\nname does not exist..";

n2--;

}

}

n2+=i;

}

else

cout<<"first input records";

getch();

break;

case 6: clrscr(); //list of prisoner released

if(flag==1)

{

gotoxy(1,4);

cout<<"PRISONER";

gotoxy(3,5);

cout<<"NO";

gotoxy(12,4);

cout<<"NAME";

gotoxy(23,4);

cout<<"FATHER'S NAME";

gotoxy(43,4);

cout<<"ADM.";

gotoxy(43,5);

cout<<"DATE";

gotoxy(53,4);

cout<<"RELEASE";

gotoxy(53,5);

cout<<"DATE";

gotoxy(63,4);

cout<<"AGE";

gotoxy(69,4);

cout<<"CASE";

gotoxy(69,5);

cout<<"DETAILS";

output2(a2,n2);

}

else

cout<<"first input records";

getch();

break;

case 7: clrscr();

if(flag==1) //prisoner released on particular date

{

gotoxy(1,1);

cout<<"enter the date to be searched:";

gotoxy(35,1);

cin>>d2.day;

gotoxy(37,1);

cout<<"/";

gotoxy(38,1);

cin>>d2.mon;

gotoxy(40,1);

cout<<"/";

gotoxy(41,1);

cin>>d2.year;

z=search2(a2,n,d2);

if(z==0)

{

cout<<"no prisoner released on this date";

}

else

{

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

{

clrscr();

cout<<"PRISONER NO:"<<a2[dat[i]].pno<<endl

<<"NAME:"<<a2[dat[i]].pname<<endl

<<"FATHER'S NAME:"<<a2[dat[i]].fname<<endl

<<"ADM. DATE:"<<a2[dat[i]].d1.day<<"/"<<a2[dat[i]].d1.mon<<"/"<<a2[dat[i]].d1.year<<endl

<<"AGE:"<<a2[dat[i]].age<<endl

<<"CASE DETAILS:"<<a2[dat[i]].crime<<endl<<endl;

}

}

}

else

cout<<"first input records";

getch();

break;

case 8: exit(0); //exit

default: cout<<"incorrect choice";

}

}

getch();

}

else

{

clrscr();

cout<<"\n\n\t\tincorrect password...try again";

getch();

}

}

getch();

}