**Assignment 6 Program 2**

Source Code :

#include<iostream.h>

#include<math.h>

#include<conio.h>

#include<string.h>

#include<stdio.h>

#include<stdlib.h>

void line()

{

cout<<"\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_"<<endl;

}

struct date

{

int dd;

int mm;

int yy;

};

void inpdate(date &d)

{

cout<<"Input day ";cin>>d.dd;

cout<<"Input month ";cin>>d.mm;

cout<<"Input year ";cin>>d.yy;

}

void outdate(date d)

{

cout<<d.dd<<" / "<<d.mm<<" / "<<d.yy<<endl;

}

struct hospital

{

int patid;

char name[25];

int age;

char section[25];

date dadm;

};

void inppat(hospital &pat)

{

cout<<"Input patient number ";cin>>pat.patid;

cout<<"Input patient name ";gets(pat.name);

cout<<"Input date of admission ";inpdate(pat.dadm);

cout<<"Input your age ";cin>>pat.age;

cout<<"Input section ";gets(pat.section);

}

void inpdata(hospital pat[],int &ub)

{

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

inppat(pat[i]);

}

void displayall(hospital pat[], int ub)

{

clrscr();

gotoxy(1,1);cout<<"patid";

gotoxy(10,1);cout<<"name";

gotoxy(35,1);cout<<"age";

gotoxy(40,1);cout<<"section";

gotoxy(65,1);cout<<"date of adm";

gotoxy(1,2);line();

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

{

gotoxy(1,(i+3));cout<<pat[i].patid;

gotoxy(10,(i+3));cout<<pat[i].name;

gotoxy(35,(i+3));cout<<pat[i].age;

gotoxy(40,(i+3));cout<<pat[i].section;

gotoxy(65,(i+3));outdate(pat[i].dadm);

}

cout<<endl;

}

void insert(hospital pat[], int &ub)

{

int pos;

cout<<"Input the position number ";

cin>>pos;

for(int i=ub;i>=pos;i--)

{

pat[i+1]=pat[i];

}

inppat(pat[pos]);

ub++;

cout<<"Data added";

}

void del(hospital pat[], int &ub)

{

int pos=-1, i, j;

date d;

inpdate(d);

for(i=0;i<=ub;i++)

{

if(pat[i].dadm.dd==d.dd && pat[i].dadm.mm==d.mm && pat[i].dadm.yy==d.yy)

{

pos=i;

for(j=pos;j<=ub;j++)

{

pat[j]=pat[j+1];

}

ub--;

i--;

}

}

if(pos==-1) cout<<"Data not found";

else cout<<"Data found and deleted";

}

void sort(hospital pat[], int ub)

{

int i, j;

hospital temp;

for(i=0;i<=ub;i++)

{

for(j=i+1;j<=ub;j++)

{

if(strcmpi(pat[i].section, pat[j].section)>0)

{

temp=pat[i];

pat[i]=pat[j];

pat[j]=temp;

}

}

}

cout<<"sorted";

}

int main()

{

hospital pat[10];

int ub, ch;

char c;

cout<<"Input number of patients ";cin>>ub ;

do

{

clrscr();

int ch;

cout<<"Menu"<<endl;

cout<<"1. Create array of patients"<<endl;

cout<<"2. Display array of patients"<<endl;

cout<<"3. Add patient"<<endl;

cout<<"4. Delete patient"<<endl;

cout<<"5. Sort list"<<endl;

cout<<"6. Exit"<<endl;

cout<<"Input the number corresponding to your choice : ";

cin>>ch;

switch(ch)

{

case 1:

inpdata(pat,ub);

break;

case 2:

displayall(pat,ub);

break;

case 3:

insert(pat,ub);

break;

case 4:

del(pat,ub);

break;

case 5:

sort(pat,ub);

break;

case 6:

exit(0);

break;

default:

cout<<"Invalid"<<endl;

}

cout<<"Press key to continue"<<endl;

c=getch();

}while(1);

}

Output :

1 :

Menu

1. Create array of patients

2. Display array of patients

3. Add patient

4. Delete patient

5. Sort list

6. Exit

Input the number corresponding to your choice :

2 :

patid name age section date of adm

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1 Sandeep 65 Neurology 15 / 1 / 2018

2 Ravina 24 Orthopedic 15 / 1 / 2018

3 Karan 36 Cardiology 4 / 1 / 2018

4 Vimal S 48 Oncology 31 / 12 / 2017

5 Krish J 12 Pulmonary 28 / 12 / 2017

Press key to continue

3 :

Menu

1. Create array of patients

2. Display array of patients

3. Add patient

4. Delete patient

5. Sort list

6. Exit

Input the number corresponding to your choice : 3

Input the position number 3

Input patient number 7

Input patient name Vignesh

Input date of admission Input day 15

Input month 01

Input year 2018

Input your age 6

Input section Pediatric

Data addedPress key to continue

4 :

Menu

1. Create array of patients

2. Display array of patients

3. Add patient

4. Delete patient

5. Sort list

6. Exit

Input the number corresponding to your choice : 4

Input day 15

Input month 01

Input year 2018

Data found and deleted

Data addedPress key to continue

5 :

Menu

1. Create array of patients

2. Display array of patients

3. Add patient

4. Delete patient

5. Sort list

6. Exit

Input the number corresponding to your choice : 5

sorted

Data addedPress key to continue

6 :

Menu

1. Create array of patients

2. Display array of patients

3. Add patient

4. Delete patient

5. Sort list

6. Exit

Input the number corresponding to your choice : 6