Vaniila icecream

#include<iostream>

using namespace std;

struct node

{ int roll;

struct node \*next;

};

class info

{ node \*head1=NULL,\*temp1=NULL,\*head2=NULL,\*temp2=NULL,\*head=NULL,\*temp=NULL,\*h1=NULL,\*head3=NULL,\*temp3=NULL;

int c,i,f,j,k;

public:

node \*create();

void insert();

void allstud();

void vanila();

void butters();

void uice();

void nice();

void notice();

void ovanila();

void obutters();

void display();

} ;

node \*info::create()

{ node \*p=new(struct node);

cout<<"enter student rollno";

cin>>c;

p->roll=c;

p->next=NULL;

return p;

}

void info::insert()

{

node \*p=create();

if(head==NULL)

{ head=p;

}

else

{ temp=head;

while(temp->next!=NULL)

{ temp=temp->next; }

temp->next=p;

}

}

void info::display()

{ temp=head;

while(temp->next!=NULL)

{ cout<<"\n"<<temp->roll;

temp=temp->next;

} cout<<"\n"<<temp->roll;

}

void info::allstud()

{cout<<"enter no. of students";

cin>>k;

head=NULL;

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

{ insert();

h1=head;

} display();

head=NULL;

}

void info::vanila()

{

cout<<"enter no. of students who like vanilla";

cin>>k;

head=NULL;

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

{ insert();

head1=head;

} display();

head=NULL;

}

void info::butters()

{

cout<<"enter no. of students who like butterscotch";

cin>>j;

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

{ insert();

head2=head;

} display();

head=NULL;

}

void info::uice()

{ cout<<"students who like vanilla or butterscotch\n";

temp1=head1;

while(temp1!=NULL)

{

node \*p=new(struct node);

p->roll=temp1->roll;

p->next=NULL;

if(head3==NULL)

{ head3=p;

}

else

{ temp3=head3;

while(temp3->next!=NULL)

{ temp3=temp3->next; }

temp3->next=p;

}

temp1=temp1->next;

}

temp2=head2;

while(temp2!=NULL)

{ f=0;

temp1=head1;

while(temp1!=NULL)

{

if(temp2->roll==temp1->roll)

{ f=1; }

temp1=temp1->next;

}

if(f==0)

{

node \*p=new(struct node);

p->roll=temp2->roll;

p->next=NULL;

if(head3==NULL)

{ head3=p;

}

else

{ temp3=head3;

while(temp3->next!=NULL)

{ temp3=temp3->next; }

temp3->next=p;

}

}

temp2=temp2->next;

}

temp3=head3;

while(temp3->next!=NULL)

{ cout<<"\n"<<temp3->roll;

temp3=temp3->next;

} cout<<"\n"<<temp3->roll;

}

void info::ovanila()

{

cout<<"\students like only vanila \n";

temp1=head1;

while(temp1!=NULL)

{ temp2=head2;

f=0;

while(temp2!=NULL)

{ if(temp1->roll==temp2->roll)

{ f=1; }

temp2=temp2->next;

}

if(f==0)

{ cout<<"\n"<<temp1->roll; }

temp1=temp1->next;

}

}

void info::obutters()

{

cout<<"\students like only butterscotch\n";

temp2=head2;

while(temp2!=NULL)

{ temp1=head1;

f=0;

while(temp1!=NULL)

{ if(temp2->roll==temp1->roll)

{ f=1; }

temp1=temp1->next;

}

if(f==0)

{ cout<<"\n"<<temp2->roll; }

temp2=temp2->next;

}

}

void info::nice()

{

cout<<"\students who like both vanilla and butterscotch\n";

temp1=head1;

while(temp1!=NULL)

{ temp2=head2;

while(temp2!=NULL)

{ if(temp1->roll==temp2->roll)

{ cout<<"\n"<<temp1->roll; }

temp2=temp2->next;

}

temp1=temp1->next;

}

}

void info::notice()

{

cout<<"\students who like neither vanilla nor butterscotch\n";

temp=h1;

while(temp!=NULL)

{ temp3=head3;

f=0;

while(temp3!=NULL)

{ if(temp->roll==temp3->roll)

{ f=1; }

temp3=temp3->next;

}

if(f==0)

{ cout<<"\n"<<temp->roll; }

temp=temp->next;

}

}

int main()

{ info s;

int i;

char ch;

do{

cout<<"\n choice the options";

cout<<"\n 1. To enter all students rollno ";

cout<<"\n 2. To enter the rollno of student who like vanilla";

cout<<"\n 3. To enter the rollno of student who like butterscotch";

cout<<"\n 4. To display the rollno of student who like vanilla or butterscotch";

cout<<"\n 5. To display the rollno of student who like only vanila";

cout<<"\n 6. To display the rollno of student who like only butterscotch";

cout<<"\n 7. To display the rollno of student who like both vanilla and butterscotch ";

cout<<"\n 8. To display the rollno of student who neither like vanilla nor butterscotch";

cin>>i;

switch(i)

{ case 1: s.allstud();

break;

case 2: s.vanila();

break;

case 3: s.butters();

break;

case 4: s.uice();

break;

case 5: s.ovanila();

break;

case 6: s. obutters();

break;

case 7: s.nice();

break;

case 8: s.notice();

break;

default: cout<<"\n unknown choice";

}

cout<<"\n do you want to continue enter y/Y \n";

cin>>ch;

}while(ch=='y'||ch=='Y');

return 0;

}