

```

#include<iostream>
using namespace std;
struct student
{
    int Rollno;
    char name[20];
    float per;
};

void create(student [],int);
void display(student [],int);
void bubblesort(student[],int);
int linear_search(student[],int,int);

void create( student s[20],int n)
{
    int i;
    cout<<"\n Enter the details of Students";
    cout<<"\n Rollno"<<"\t"<<"Name"<<"\t"<<"per";
    for(i=0;i<n;i++)
        cin>>s[i].Rollno>>s[i].name>>s[i].per;
}

void display(student s[20],int n)
{
    int i;
    cout<<"\n Details of Students\n";
    for(i=0;i<n;i++)
        cout<<s[i].Rollno<<"\t"<<s[i].name<<"\t"<<s[i].per<<"\n";
}

void bubblesort(student s[20],int n)
{
    int i,j;
    student temp;
    for(i=0;i<n;i++)
    {
        for(j=0;j<n-i-1;j++)
        {
            if(s[j].Rollno> s[j+1].Rollno)
            {
                temp=s[j];
                s[j]=s[j+1];
                s[j+1]=temp;
            }
        }
    }
}

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int linear_search(student s[20],int n,int rno)
{
    int i;
    for(i=0;i<n;i++)
    {
        if(s[i].Rollno==rno)
        {

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        break;
    }
}
return i;
}

int main()
{
    struct student s[20];
    int n, ch ,ch1,i,rno;
    do
    {
        cout<<"\n 1. Create Database";
        cout<<"\n 2.Bubblesort";
        cout<<"\n 3.Linear Search";
        cout<<"\n Enter the choice";
        cin>>ch;
        switch(ch)
        {
            case 1:
                cout<<"\n Enter the number of Records";
                cin>>n;
                create(s,n);
                display(s,n);
                break;

            case 2:
                bubblesort(s,n);
                display(s,n);
                break;

            case 3:
                cout<<"\n Enter the rollnumber you want to search";
                cin>>rno;
                i=linear_search(s,n,rno);
                cout<<"\n Element found at location "<<i+1;
                break;

        }

    }while(ch1!=4);
    return 0;
}

```

OUTPUT

```

1. Create Database
2.Bubblesort
3.Linear Search
Enter the choice1
Enter the number of Records2
Enter the details of Students
Rollno Name per3
om
76
5
vijay
56
Details of Students

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3 om 76
5 vijay 56

1. Create Database

2.Bubblesort

3.Linear Search

Enter the choice2

Details of Students

3 om 76

5 vijay 56

1. Create Database

2.Bubblesort

3.Linear Search

Enter the choice3

Enter the rollnumber you want to search3

Element found at location 1

1. Create Database

2.Bubblesort

3.Linear Search

Enter the choice