18.Write a C program to arrange a series of numbers using Quick Sort

#include<stdio.h>

void quicksort(int[ ],int,int);

int main()

{

int low, high, pivot, t, n, i, j, a[10];

int clrscr();

printf("\nHow many elements you want to sort ? ");

scanf("%d",&n);

printf("\Enter elements for an array:");

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

scanf("%d",&a[i]);

low=0;

high=n-1;

quicksort(a,low,high);

printf("\After Sorting the elements are:");

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

printf("%d ",a[i]);

}

void quicksort(int a[ ],int low,int high)

{

int pivot,t,i,j;

if(low<high)

{

pivot=a[low];

i=low+1;

j=high;

while(1)

{

while(pivot>a[i]&&i<=high)

i++;

while(pivot<a[j]&&j>=low)

j--;

if(i<j)

{

t=a[i];

a[i]=a[j];

a[j]=t;

}

else

break;

}

a[low]=a[j];

a[j]=pivot;

quicksort(a,low,j-1);

quicksort(a,j+1,high);

}

}

