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#include<stdio.h>

int partition(int a[],int low,int high)
{
    int i,j,pivot,temp;
    pivot=a[high];
    i=low-1;
    for(j=low;j<high;j++)
    {
        if(a[j]<pivot)
        {
            i++;
            temp=a[i];
            a[i]=a[j];
            a[j]=temp;
        }
    }
    temp=a[i+1];
    a[i+1]=a[high];
    a[high]=temp;
    return(i+1);
}

void quicksort(int a[],int low,int high)
{
    int pi;
    if(low<high)
    {
        pi=partition(a,low,high);
        quicksort(a,low,pi-1);
        quicksort(a,pi+1,high);
    }
}

int main()
{
    int i,n,a[20];

    printf("\n Enter number of element in array less than 20 : ");
    scanf("%d",&n);

    printf("\n Enter %d element in array \n",n);
    for(i=0;i<n;i++)
    {
        scanf("%d",&a[i]);
    }

    printf("\n Array before sort");
    for(i=0;i<n;i++)
    {
        printf(" %d \t",a[i]);
    }
    quicksort(a,0,n-1);
    printf("\n Array after sort");
    for(i=0;i<n;i++)
    {

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        printf(" %d \t",a[i]);  
    }  
    return 0;  
}
```