#include<iostream>

using namespace std;

recursion\_sort(int a[], int p1, int p2)

{

int i = p1;

int j = p2;

int x;

int avg = a[(i + j) / 2];

for(i =p1 ;i<=j ;)

{

while (a[i]<avg)

i++;

while (a[j]>avg)

j--;

if (i<= j)

{

x = a[i];

a[i] = a[j];

a[j] = x;

j--;

i++;

}

}

if (i< p2)

recursion\_sort(a, i, p2);

if (p1 < j)

recursion\_sort(a, p1, j);

}

int main()

{

int array[10];

int p1 = 0, p2 = 10;

cout<< "Enter elements: "<<endl;

int i = 0;

while(i<10)

{

cin>> array[i];

i++;

}

recursion\_sort(array, p1, p2);

cout<< "Sorted array is : ";

for (int i = 0; i< 10; i++)

{

cout<< array[i] << " ";

}

}