

```

#include<iostream>

using namespace std;

void swap(int *a,int *b)

{

int t=*a;

*a=*b;

*b=t;

}

void printArray(int array[],int size)

{

int i;

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

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

cout<<endl;

}

int partition(int array[],int low,int high)

{

int pivot=array[high];

int i=(low-1);

for(int j=low;j<high;j++)

{

if(array[j]<=pivot)

{

i++;

swap(&array[i],&array[j]);

}

}

}

```

```
swap(&array[i+1],&array[high]);  
return(i+1);  
}  
void quicksort(int array[],int low,int high)  
{  
if(low<high)  
{  
int pi=partition(array,low,high);  
quicksort(array,low,pi-1);  
quicksort(array,pi+1,high);  
}  
}  
int main()  
{  
int data[]={2,5,3,7,1,9};  
int n=sizeof(data)/sizeof(data[0]);  
cout<<"Unsorted Array:\n";  
printArray(data,n);  
quicksort(data,0,n-1);  
cout<<("Sorted array in ascending order:\n");  
printArray(data,n);  
}
```

Unsorted Array:

2 5 3 7 1 9

Sorted array in ascending order:

1 2 3 5 7 9

Process exited after 0.03876 seconds with return value 0

Press any key to continue . . . |