LAB ASSIGNMENT 2

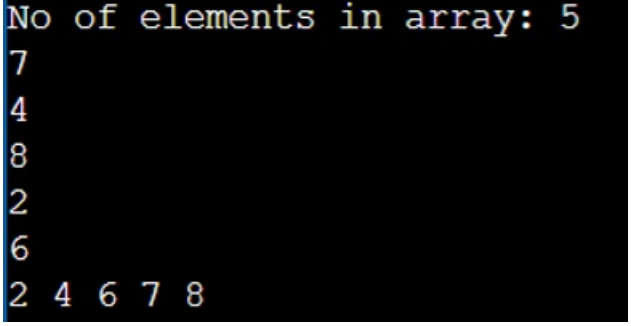
Q Implementation of sorting algorithm using non recursive method.

USING BUBBLE SORT:

Source code:

```
#include <iostream>
using namespace std;
int main()
{
int n;
cout<<"No of elements in array: ";
cin>>n;
int arr[n];
for(int i=0;i<n;i++)
{
cin>>arr[i];
}
int count=1;
while(count<n)
{
for(int i=0;i<n-count;i++){
if(arr[i]>arr[i+1]){
int temp=arr[i];
arr[i]=arr[i+1];
arr[i+1]=temp;
}
}
count++;
}
for(int i=0;i<n;i++){
cout<<arr[i]<<" ";
}cout<<endl;
return 0;
}
```

OUTPUT:



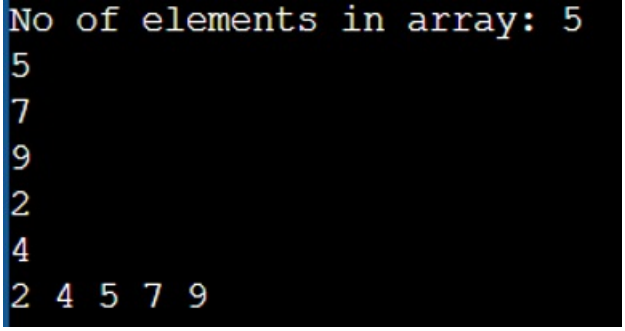
Q Implementation of sorting algorithm using recursive method.

USING SELECTION SORT:

Source Code:

```
#include <iostream>
using namespace std;
int main()
{
int n;
cout<<"No of elements in array: ";
cin>>n;
int arr[n];
for(int i=0;i<n;i++)
{
cin>>arr[i];
}
{
for(int i=0;i<n-1;i++){
for(int j=i+1;j<n;j++){
if(arr[j]<arr[i]){
int temp=arr[j];
arr[j]=arr[i];
arr[i]=temp;
}
}
}
}
for(int i=0;i<n;i++){
cout<<arr[i]<<" ";
}cout<<endl;
return 0;
}
```

OUTPUT:


No of elements in array: 5
5
7
9
2
4
2 4 5 7 9