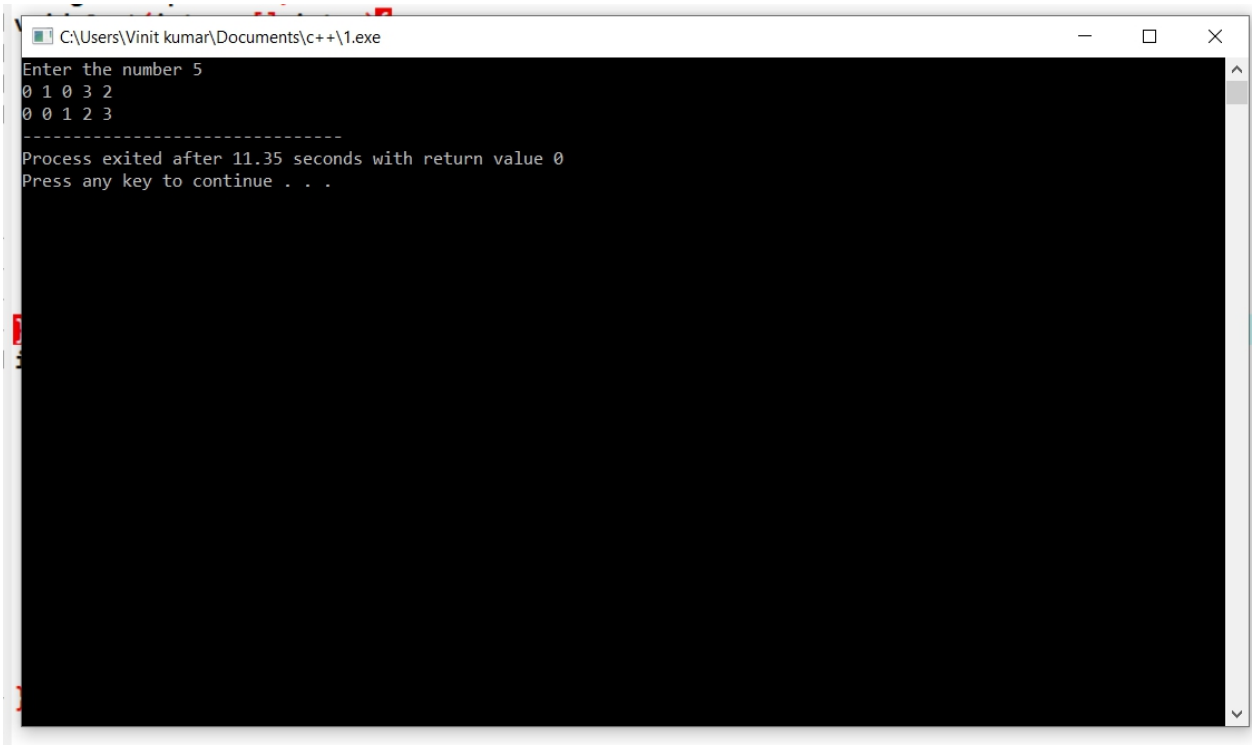
Assignment-5 Roll-20BCS142

Question 1

```
#include<iostream>
using namespace std;
void Sort(int arr[],int n){
        for(int i=0;i<n-1;i++){
                for(int j=0;j<n-1-i;j++){
                        if(arr[j]>arr[j+1]){
                                int t=arr[j];
                                arr[j]=arr[j+1];
                                arr[j+1]=t;
                        }
                }
        }
}
int main(){
  int n;
  cout<<"Enter the number ";
  cin>>n;
  int arr[n];
  for(int i=0;i<n;i++)
    cin>>arr[i];
```

```
   Sort(arr,n);
        for(int i=0;i<n;i++)
        cout<<arr[i]<<" ";
 return 0;
}
```

Output of 1st



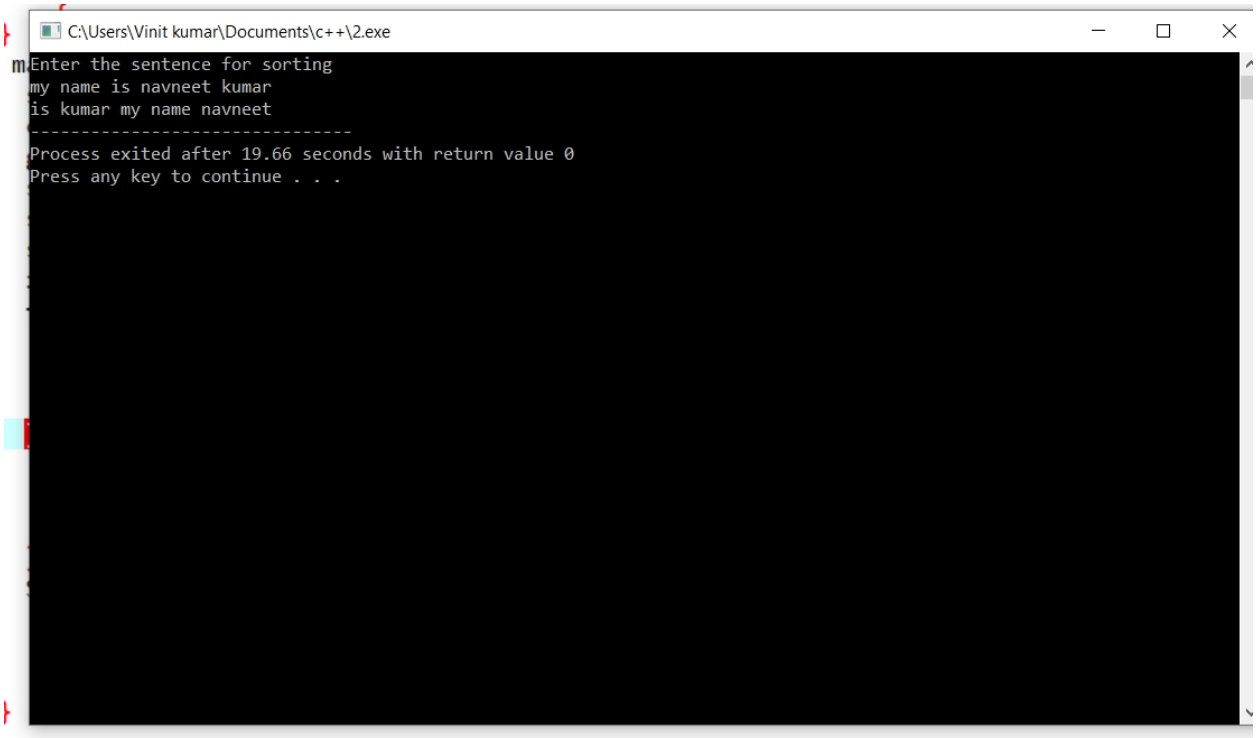
Question no.2

```
#include <iostream>
using namespace std;
void Swap(string &p,string &q){
        string t=p;
        p=q;
```

```
        q=t;
}
void Sort(string s[],int n){
        for(int i=0;i<n-1;i++){
                for(int j=0;j<n-i-1;j++){
                        if(s[j]>s[j+1])
                         Swap(s[j],s[j+1]);
                }
        }
}
 main(){
  string s;
  cout<<"Enter the sentence for sorting \n";
  getline(cin,s);
  s+=" ";
  string t[20];
  string p="";
  int j=0;
  for(int i=0;i<s[i]!='\0';i++){
        if(s[i]==' '){
          t[j++]=(p+" ");
          p="";
```

```
 }
        else{
            p+=s[i];
            }
 }
 Sort(t,j);
  for(int i=0;i<j;i++)
    cout<<t[i];
       return 0;
}
```

Output of 2nd



Question 3

```
#include <iostream>
using namespace std;
struct points{
        int x,y;
};
void Swap(points &p,points &q){
        points t;
   t.x=p.x,t.y=p.y;
   p.x=q.x ,p.y=q.y;
   q.x=t.x ,q.y=t.y;
}
void Sort(points s[],int n){
        for(int i=0;i<n-1;i++){
                for(int j=0;j<n-i-1;j++){
                        if(s[j].y>s[j+1].y)
                         Swap(s[j],s[j+1]);
                         if(s[j].y==s[j+1].y &&(s[j].x)>s[j+1].x)
                         Swap(s[j],s[j+1]) ;
                }
        }
}
```

```
int  main()
{
        int n;
  cout<<"Enter the no. of points \n";
  cin>>n;
  points p[n];
  for(int i=0.;i<n;i++){
        cin>>p[i].x>>p[i].y;
  }
  Sort(p,n);

  for(int i=0;i<n;i++)
{
        cout<<"("<<p[i].x<<","<<p[i].y<<")"<<" ";
  }
        return 0;
}
```

Output of 3rd