Write a function SelectionSort which will sort in ascending /descending order based on user choice. Write a main function to test the function.

```
#include <iostream>

int (*pComparison)(int, int);

// Here is a comparison function that sorts in ascending order
int  Ascending(int nX, int nY)
{
   return nY > nX;
}

// Here is a comparison function that sorts in descending order
int  Descending(int nX, int nY)
{
   return nY < nX;
}

// The third parameter is used for passing user defined comparison function
void SelectionSort(int a[], int n, int (*pComparison)(int, int))
{
        int i,j,temp,pos;

        for(i = 0; i < n-1; i++)
        {
                pos = i;
                for(j=i+1; j<n; j++)
                    if(pComparison(a[j], a[pos])) //function call using function pointer
                        pos = j;
                temp = a[pos];
                a[pos] = a[i];
                a[i] = temp;
        }
}

// This function prints out the values in the array
void PrintArray(int a[], int nSize)
{
   for (int i=0; i < nSize; i++)
      cout << a[i] << " ";
   cout << endl;
}
```

```
int main()
{

	int a[100], n;
	cout<<"Read the value for n :";
	cin>>n;
	cout<<"Enter the values : ";
	for(int i=0;i<n;i++)
		cin>>a[i];

	 // Sort the array in descending order using the Descending() function
	 SelectionSort(a, n, Descending);
	 PrintArray(a, n);

	 // Sort the array in ascending order using the Ascending() function
	 SelectionSort(a, n, Ascending);
	 PrintArray(a, n);

	 return 0;
}
```