Name: Sohansingh Rajput
Roll No.: 46
SY-IT

Code:

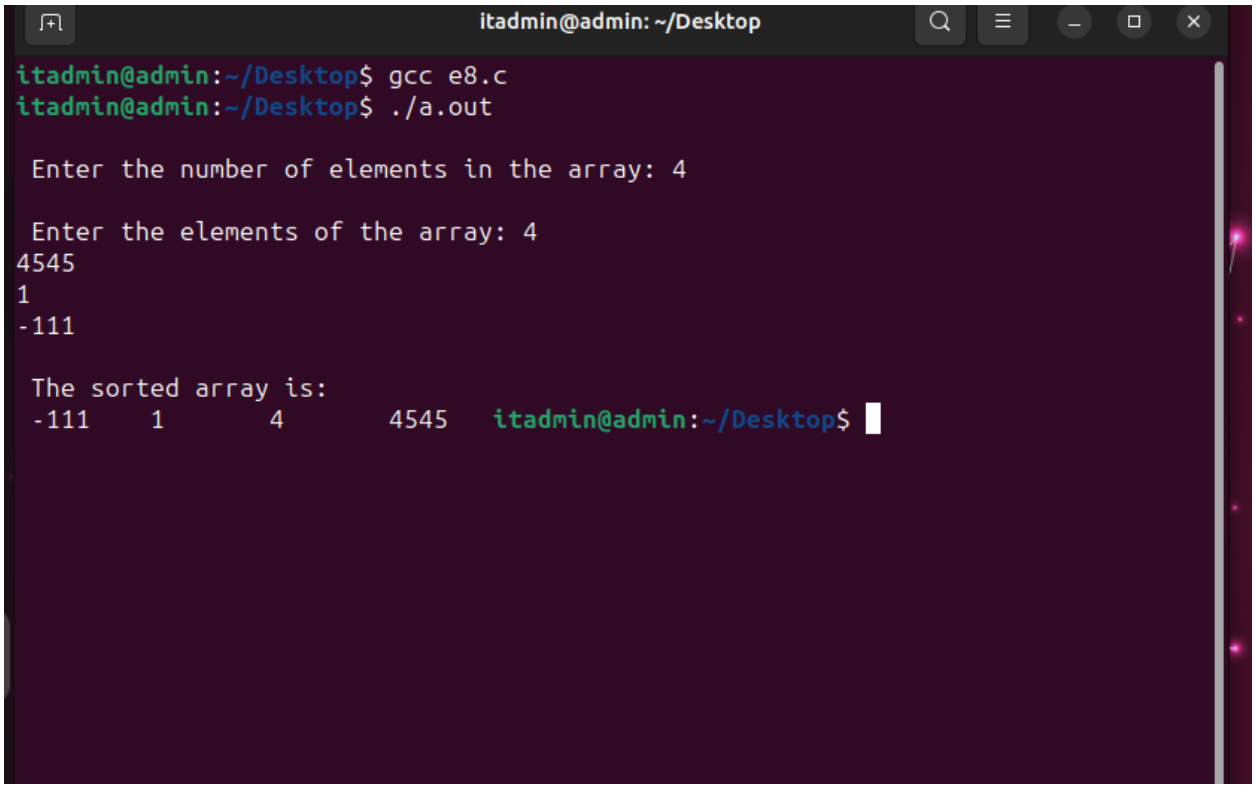
```
#include <stdio.h>
#include <stdlib.h>


int smallest(int arr[], int k, int n);

void selection_sort(int arr[], int n);
void main()
{
int arr[10], i, n;
printf("\n Enter the number of elements in the array: ");
scanf("%d", &n);
printf("\n Enter the elements of the array: ");
for(i=0;i<n;i++) {  scanf("%d", &arr[i]); }
selection_sort(arr, n);
printf("\n The sorted array is: \n");
for(i=0;i<n;i++) printf(" %d\t", arr[i]);
}
int smallest(int arr[], int k, int n)
{ int pos = k, small=arr[k], i;
for(i=k+1;i<n;i++)
{
if(arr[i]< small)
{   small = arr[i];   pos = i;  }
 }
return pos;
}
void selection_sort(int arr[],int n)
{
int k,
pos,
temp;
for(k=0;k<n;k++)
{
pos = smallest(arr, k, n);
temp = arr[k];
arr[k] = arr[pos];
arr[pos] = temp;
}
```

}

Output:


itadmin@admin: ~/Desktop
itadmin@admin:~/Desktop$ gcc e8.c
itadmin@admin:~/Desktop$ ./a.out
Enter the number of elements in the array: 4
Enter the elements of the array: 4
4545
1
-111
The sorted array is:
-111 1 4 4545 itadmin@admin:~/Desktop$