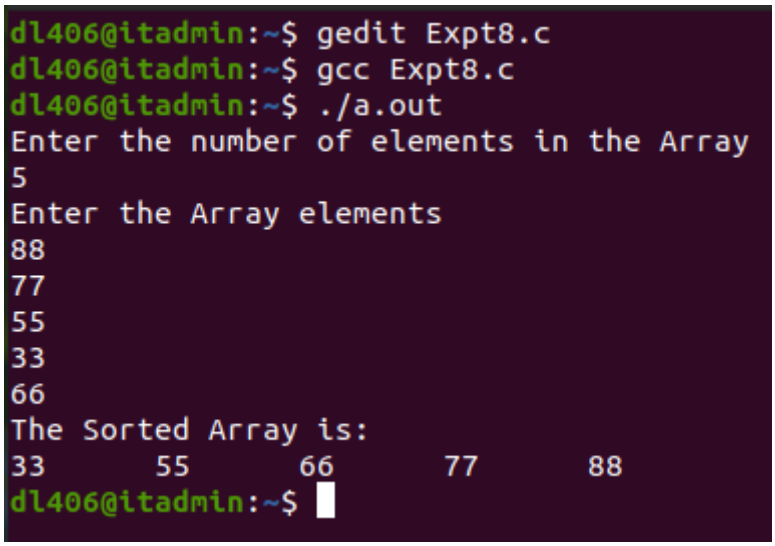
EXPERIMENT NO. 8

INPUT:

```c
#include<stdio.h>
#include<stdlib.h>
int smallest(int arr[],int k,int n);
void selectionsort(int arr[],int n);
void main(int argc,char *argv[])
{
int arr[10],i,n;
printf("Enter the number of elements in the Array \n");
scanf("%d",&n);
printf("Enter the Array elements \n");
for(i=0;i<n;i++)
{
scanf("%d",&arr[i]);
}
selectionsort(arr,n);
printf("The Sorted Array is: \n");
for(i=0;i<n;i++)
{
printf("%d\t",arr[i]);
}
printf("\n");
}
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;
}
```

```c
void selectionsort(int arr[],int n)
{
int k;
int pos;
int temp;
for(k=0;k<n;k++)
{
pos=smallest(arr,k,n);
temp=arr[k];
arr[k]=arr[pos];
arr[pos]=temp;
}
}
```

OUTPUT:


dl406@itadmin:~$ gedit Expt8.c
dl406@itadmin:~$ gcc Expt8.c
dl406@itadmin:~$ ./a.out
Enter the number of elements in the Array
5
Enter the Array elements
88
77
55
33
66
The Sorted Array is:
33 55 66 77 88
dl406@itadmin:~$