❖ Bubble Sort Program Source Code:

```
//Program for Bubble Sorting
#include<stdio.h>
void main()
{int i,j,n;
   printf("enter the size of array:");
   scanf("%d",&n);
   int a[n],c;
   printf("enter the values in array:");
for(i=0;i<n;i++)
scanf("%d",&a[i]);
{for(i=1;i<n;i++)
   {for(j=0;j<n-i;j++)
   if(a[j]>a[j+1])
{
   c=a[j];
   a[j]=a[j+1];
   a[j+1]=c;
}}}
printf("Output:");
printf("\n");
for(i=0;i<n;i++)
{printf("%d\n",a[i]);}


//By Gaurav Yadav(11911038|CSE)
}
```

❖ Bubble Sort Program Output:

```
C:\Users\gaurav\Desktop>gcc C:\Users\gaurav\Desktop\bubblesort.c

C:\Users\gaurav\Desktop>a
enter the size of array:8
enter the values in array: 9 8 7 6 5 4 3 2
Output:
2
3
4
5
6
7
8
9
```

❖ Selection Sort Program Source Code:

```
//Selection Sort Program
#include <stdio.h>
void  main()
{
  int  n,flag, t;

  printf("Enter the size of array:");
  scanf("%d", &n);
  int a[n];
  for (int i = 0; i < n; i++)
    scanf("%d", &a[i]);

  for (int i = 0; i< (n - 1); i++)
  {
    flag = i;

    for (int j = i+ 1; j < n; j++)
    {
      if (a[flag] > a[j])
          {flag= j;}
    }
    if (flag != i)
    {
      t = a[i];
      a[i] = a[flag];
      a[flag] = t;
    }
  }
  printf("Output:");
printf("\n");
for (int i = 0; i < n; i++)
{printf("%d\n", a[i]);}
//By Gaurav Yadav(11911038|CSE)
}
```

❖ Selection Sort Program Output:

```
C:\Users\gaurav\Desktop>gcc C:\Users\gaurav\Desktop\Selectionsort.c

C:\Users\gaurav\Desktop>a
Enter the size of array:9
987 56657 34334 2336 54545 676 89 0 34
Output:
0
34
89
676
987
2336
34334
54545
56657
```