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(1BM19CS158)

Bubble Sort

```
#include <stdio.h>
void bubblesort (int list [], int size)
{
  int temp, i, j;
  for (i=0; i<size; i++)
  {
    for (j=i; j<size; j++)
    {
      if (list [i] > list [j])
      {
        temp= list [i];
        list [i]= List [j];
        list [j] = temp;
      }
    }
  }
}
int main ()
{
  int size, i, list [25];
printf (" Enter the size of the list :");
scanf ("%d", & size);
printf ("Enter the elements:");
for (i =0; i<size; i++)
  {
    scanf ("%d", & list [i]);
  }
  bubblesort (list, size);
  printf (" List after bubblesort: ");
  for (i=0; i<size; i++)
  {
    printf ("%od ", List [i]);
  }
    printf ("\n");
}
```

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Selection Sort

```
#include <stdio.h>
void swap (int *xp, int *yp)
{
    int temp = *xp;
    *xp = *yp;
    *yp = temp;
}
void selectionsort (int list[], int size)
{
int i, j, min;
// One by one move boundary of unsorted subarray
for (i=0; i< size-1; i++)
{
// Find the minimum element in unsorted array
  min = i;
for (j = i+1; j < size; j++)
  if (list [j] < list [min])
     min = j;
// Swap the found minimum element with the first
element
swap (&list [min], &list [i]);
}
}
/* Function to print an array */
void printArray (int list [], int size)
{
   int i;
for (i=0; i< size; i++)
printf ("%d", list [i]);
printf ("\n");
}
```

```
// Driver program to test above functions

int main()
{
 int size, list[25];
printf("Enter the size of the list:");
scanf("%d", &size);
printf("Enter the elements of the list:");
for(int i=0; i<size; i++)
{
   scanf("%d", &list[i]);
}
 selectionsort(list, size);
printf("After selection sort: \n");
printArray(list, size);
return 0;
}
```