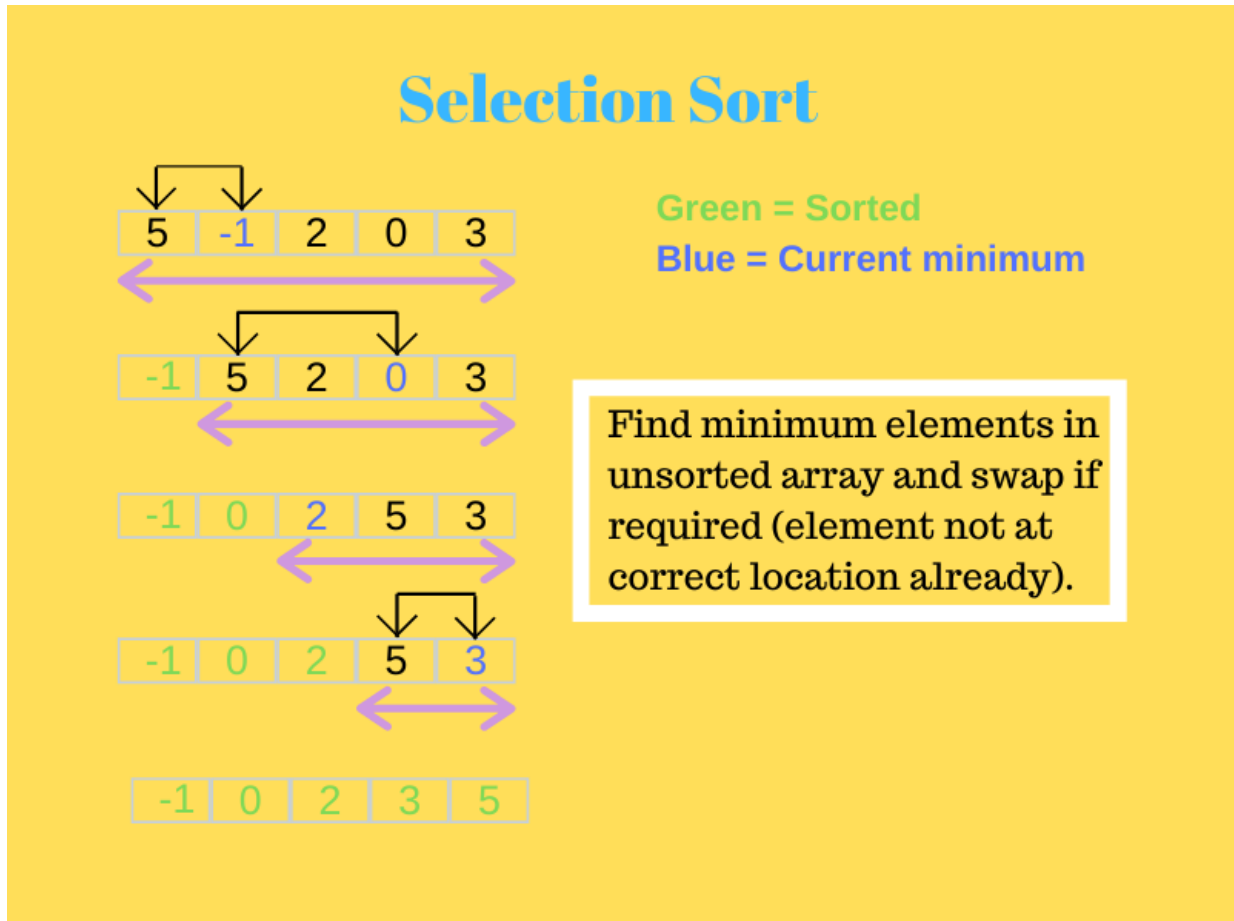


# Selection sort



Selection sort in C to sort numbers of an array in ascending order. Selection sort algorithm (for ascending order): Find the minimum element in the array and swap it with the element in the 1st position. Find the minimum element again in the remaining array[2, n] and swap it with the element at 2nd position, now we have two elements at their correct positions. We have to do this n-1 times to sort the array.

## Code:

```
1  #include<stdio.h>
2
3  int main()
4  {
5      int a[100],n,i,j,temp;
6
7      printf("\n Enter the Number of Elements: ");
8      scanf("%d",&n);
9
10     for(i=0;i<n;i++)
11     {
12         printf("\n Enter Element %d : ",(i+1));
13         scanf("%d",&a[i]);
14     }
15
16     for(i=0;i<n-1;i++)
17     {
18
19         for(j=i+1;j<n;j++)
20         {
21
22             if(a[i]>=a[j])
23             {
24                 temp=a[i];
25                 a[i]=a[j];
26                 a[j]=temp;
27             }
28         }
29     }
30
31     printf("\n The Sorted array in ascending order: ");
32     for(i=0;i<n;i++)
33     {
34         printf("%d ",a[i]);
35     }
36 }
37
38
```

## Output:

```
C:\Users\ACESBD\Downloads\selsort.exe

Enter the Number of Elements: 5
Enter Element 1 : 5
Enter Element 2 : -9
Enter Element 3 : 45
Enter Element 4 : 2
Enter Element 5 : -23

The Sorted array in ascending order: -23 -9 2 5 45
-----
Process exited after 16.07 seconds with return value 0
Press any key to continue . . . █
```

---END---