Selection Sort :-

* selection sorting is conceptually the most simplest sorting algorithm. This algorithm first find the smallest element in the array and exchanges it with the element in the first position, then find the second smallest element and exchange it with the element in the smallest position and continue this way until the entire element is sorted.

original Array

[0]   [1]   [2]   [3]   [4]   [5]
 3   6   1   8   4   5

[0]	3	1	1	1	1	1
[1]	6	6	3	3	3	3
[2]	1	3	6	4	4	4
[3]	8	8	8	8	5	5
[4]	4	4	4	6	6	6
[5]	5	5	5	5	8	8

* In the 1st pass the smallest element found is 1, so it is placed at the 1st position, then leaving 1st element, smallest element is searched from the rest of the element, there is the smallest element so it is placed at the 2nd position

we leave 1 & 3 from the rest of the elements, we search for the smallest and put at 3rd position and keep doing this until array is sorted

```
Void selectionsort (int a[], int size)
{
  int i, j, min, temp;
  for (i=0; i<size; i++)
  {
    min = i;
    for (j=i+1; j< size-1; j++)
    {
      if (a[j] < a[min])
      {
        min = j;
      }
      temp = a[i];
      a[i] = a[min];
      a[min] = temp;
```