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Experiment No.2

To implement Selection Sort and Comparative analysis for large values of ‘n’

```
#include <stdio.h>
void swap(int *xp, int *yp)
{
	int temp = *xp;
	*xp = *yp;
	*yp = temp;
}
void selectionSort(int arr[], int n)
{
	int i, j, min_idx;
	for (i = 0; i < n-1; i++)
	{
		min_idx = i;
		for (j = i+1; j < n; j++)
		if (arr[j] < arr[min_idx])
			min_idx = j;
```

```
            if(min_idx != i)
                swap(&arr[min_idx], &arr[i]);
        }
}
void printArray(int arr[], int size)
{
        int i;
        for (i=0; i < size; i++)
            printf("%d ", arr[i]);
        printf("\n");
}
int main()
{
        int arr[] = {64, 25, 12, 22, 11};
        int n = sizeof(arr)/sizeof(arr[0]);
        selectionSort(arr, n);
        printf("Sorted array: \n");
        printArray(arr, n);
        return 0;
}
```

Output:

Sorted array:

11 12 22 25 64