LAB-2

SelectionSort.c

```c
#include <stdio.h>

#include <time.h>

int main(){

    clock_t start,end;

    double timetaken;

    int rand(void);


    int  n,temp;

    printf("SELECTION SORT\n");

    printf("Enter the total elements ");

    scanf("%d", &n);

    int array[n];

    printf("Generating array elements\n");

    for (int i = 0; i < n; i++)

    {

        array[i]=rand();

        printf("%d\t",array[i]);

    }

    start=clock();
```

```c
for(int i;i<n;i++)
{
        for(int j=i+1;j<n;j++)
        {
                if(array[i]>array[j])
                {
                        temp=array[i];
                        array[i]=array[j];
                        array[j]=temp;
                }
        }
    }

printf("\n\n\nSorted Array:\n");
for (int i=0; i < n; i++)
{
  printf("%d\t",array[i]);
}

end=clock();
```

```c
    timetaken=((double)(end-start))/CLOCKS_PER_SEC;

    printf("\ntime taken = %f",timetaken);

    return 0;

}
```