

Selection-Sort

Lab-2-P

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```
#include <stdio.h> #include <time.h>
int main()
{
    int arr[100], n, i, j, min, temp;
    printf("enter the number of elements: \n");
    scanf("%d", &n);
    printf("enter the elements: \n", n);
    for (i = 0; i < n; i++)
    {
        scanf("%d", &arr[i]);
    }
    for (i = 0; i < n - 1; i++)
    {
        min = i;
        for (j = i + 1; j < n; j++)
        {
            if (arr[min] > arr[j])
                min = j;
        }
        if (min != i)
        {
            temp = arr[i];
            arr[i] = arr[min];
            arr[min] = temp;
        }
    }
    printf("The sorted array is ascending order: ");
    for (i = 0; i < n; i++)
    {
        printf("%d", arr[i]);
    }
    return 0;
}
```

// Time complexity selection sort

time_u = (double) (end - start) / clock_per_sec;

printf ("time complexity %fs", time_u);

return 0;