Exercise 4-3: Selection sort sort_select.c

- Survey the principle of selection sort on the Web and replace sort_bubble1.c with selection sort.
  - The program name is sort_select.c
  - Visualize and compare the difference with bubble sort
  - (Let's check the number of comparisons and the number of replacements)

Algorithm of selection sort

1. Find the smallest value in the data column and exchange it for the first element.
2. Next, find the smallest value in the second and subsequent data columns and exchange it for the second element.
3. Repeat this until the end of the data string

(Example)
"*" For the element to be replaced (0, 1, 2 ...)
"!" For the element of the minimum value at the time before comparison
">" For the element to be compared
(want to show that "!" And “>" are compared)

[Comparison count] and [Replacement count] are displayed at the beginning of the array.

Let's check the difference in the number of replacements compared to bubble sort

Ref: Select-sort with Gypsy folk dance
https://www.youtube.com/watch?v=Ns4TPTC8whw

```
[ 1][ 0] *!8 >2 7 4 5 6 9 0 1 3
[ 2][ 0] *8 !2 >7 4 5 6 9 0 1 3
[ 3][ 0] *8 !2 7 >4 5 6 9 0 1 3
[ 4][ 0] *8 !2 7 4 >5 6 9 0 1 3
[ 5][ 0] *8 !2 7 4 5 >6 9 0 1 3
[ 6][ 0] *8 !2 7 4 5 6 >9 0 1 3
[ 7][ 0] *8 !2 7 4 5 6 9 >0 1 3
[ 8][ 0] *8 2 7 4 5 6 9 !0 >1 3
[ 9][ 0] *8 2 7 4 5 6 9 !0 1 >3
[10][ 1] 0 *!2 >7 4 5 6 9 8 1 3
[11][ 1] 0 *!2 7 >4 5 6 9 8 1 3
[12][ 1] 0 *!2 7 4 >5 6 9 8 1 3
[13][ 1] 0 *!2 7 4 5 >6 9 8 1 3
[14][ 1] 0 *!2 7 4 5 6 >9 8 1 3
[15][ 1] 0 *!2 7 4 5 6 9 >8 1 3
[16][ 1] 0 *!2 7 4 5 6 9 8 >1 3
[17][ 1] 0 *2 7 4 5 6 9 8 !1 >3
[18][ 2] 0 1 *!7 >4 5 6 9 8 2 3
   ...
```

Minimum value is determined when it reaches to end