

```

1: #include<stdio.h>
2:
3: void printArray(int* A, int n){
4:     for (int i = 0; i < n; i++)
5:     {
6:         printf("%d ", A[i]);
7:     }
8:     printf("\n");
9: }
10:
11: void selectionSort(int *A, int n){
12:     int indexOfMin, temp;
13:     printf("Running Selection sort...\n");
14:     for (int i = 0; i < n-1; i++)
15:     {
16:         indexOfMin = i;
17:         for (int j = i+1; j < n; j++)
18:         {
19:             if(A[j] < A[indexOfMin]){
20:                 indexOfMin = j;
21:             }
22:         }
23:         // Swap A[i] and A[indexOfMin]
24:         temp = A[i];
25:         A[i] = A[indexOfMin];
26:         A[indexOfMin] = temp;
27:     }
28: }
29:
30: int main(){
31:     // Input Array (There will be total n-1 passes. 5-1 = 4 in t
32:     // 00 01 02 03 04
33:     // |03, 05, 02, 13, 12
34:
35:     // After first pass
36:     // 00 01 02 03 04
37:     // 02, |05, 03, 13, 12
38:
39:     // After second pass

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40:      // 00 01 02 03 04
41:      // 02, 03, |05, 13, 12
42:
43:      // After third pass
44:      // 00 01 02 03 04
45:      // 02, 03, 05, |13, 12
46:
47:      // After fourth pass
48:      // 00 01 02 03 04
49:      // 02, 03, 05, 12, |13
50:
51:
52:      int A[] = {3, 5, 2, 13, 12};
53:      int n = 5;
54:      printArray(A, n);
55:      selectionSort(A, n);
56:      printArray(A, n);
57:
58:      return 0;
59:  }
60:
```