

```
1  #include <stdio.h>
2  #include <stdlib.h>
3  #include <string.h>
4
5  #define SWAP(A, B) { typeof(A) C; C = A; A = B; B = C; }
6
7
8  //Complexity is O(n^2)
9  void babSort(const char * in, char * out) {
10
11     strcpy(out, in);
12
13     for(int i = 0; i < strlen(out); i++){
14         for(int j = 0; j < strlen(out) - i - 1; j++){
15             if(out[j] > out[j + 1]) {
16                 SWAP(out[j], out[j + 1]);
17             }
18         }
19     }
20
21     int main(int argc, const char * argv[]) {
22
23         if(argc <= 1) {
24             return 0;
25         }
26
27         const char * toSort = argv[1];
28         char sorted[strlen(toSort)];
29         sprintf(sorted, "%s", '\0');
30
31         printf("Input string is: %s\n", toSort);
32         babSort(toSort, sorted);
33
34         printf("Output string is: %s\n", sorted);
35
36         return 0;
37     }
```