```cpp
A4    #include <bits/stdc++.h>
      using namespace std;

      void countSort (int arr[], int n, int min, int max)
                              {
          int m = max - min + 1;
          vector <int> v(m, 0);
          for (int i = 0; i < n; i++)
              v[arr[i] - min]++;

          for (int i = 0; i < m; i++)
              for (int j = 0; j < v[i]; j++)
                  cout << (i + min) << " ";
                              }

      int main () {
          int arr[] = { 5, 0, 100, 40, 8 }
          int min = 0, max = 100;
          int n = sizeof (arr) / sizeof (arr[0]);
          countSort (arr, n, min, max);
          return 0;
      }
```