#include <stdio.h>

#include <stdlib.h>

int compare(const void \*a, const void \*b) {

return (\*(int\*)a - \*(int\*)b);

}

int maxMin(int k, int arr[], int n) {

qsort(arr, n, sizeof(int), compare);

int min\_u = arr[k - 1] - arr[0];

for (int i = 1; i <= n - k; i++) {

int un = arr[i + k - 1] - arr[i];

if (un < min\_u) {

min\_u = un;

}

}

return min\_u;

}

int main() {

int n, k;

scanf("%d", &n);

scanf("%d", &k);

int arr[n];

for (int i = 0; i < n; i++) {

scanf("%d", &arr[i]);

}

int result = maxMin(k, arr, n);

printf("%d\n", result);

return 0;

}