using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace ConsoleApplication1

{

class Program

{

static void Main(string[] args)

{

int n = int.Parse(Console.ReadLine());

int k = int.Parse(Console.ReadLine());

int[] a = new int[n];

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

{

a[i] = int.Parse(Console.ReadLine());

}

//int n = 6;

//int k = 3;

//int[] a = Array.ConvertAll("10 20 30 100 101 102".Split(' '), e => int.Parse(e));

Array.Sort(a);

int min\_dif = int.MaxValue;

int ini = 0, fin = 0;

for (int i = 0; i + k -1< a.Length; i++)

{

if (a[i + k-1] - a[i] < min\_dif)

{

ini = i;

fin = i + k-1;

min\_dif = a[i + k-1] - a[i];

}

}

// Console.WriteLine(ini + " " + fin);

Console.WriteLine(a[fin] - a[ini]);

Console.ReadLine();

}

}

}