```c
/* KSelection_QS.c */
#include <stdio.h>
#include <stdlib.h>

//选取一个序列中第k大的元素
//选中位数是k选取(一组有序的序列中选择第k个元素)算法的特例
//且选取中位数是k选取算法中时间最长的
//基于快速划分的K选取算法
int kSelection_QS(int *seq, int n, int k)
{
    int lo = 0, hi = n - 1;
    int tar = k - 1;
    for (; lo < hi;)
    {
        int i = lo, j = hi;
        int pivot = seq[lo];
        while (i < j)
        {
            while ((i < j) && (pivot <= seq[j]))
            {
                j --;
            }
            seq[i] = seq[j];
            while ((i < j) && (pivot >= seq[i]))
            {
                i ++;
            }
            seq[j] = seq[i];
        }
        seq[i] = pivot;
        if (tar == i)
        {
            break;
        }
        else if (tar < i)
        {
            hi = i - 1;
        }
        else
        {
            lo = i + 1;
        }
    }
    return seq[tar];
}

int main()
{
    int n, k;
    scanf("%d%d", &n, &k);
    int *a = (int *)malloc(sizeof(int) * n);
    int i = 0;
    for (; i < n; i ++)
    {
        scanf("%d", &a[i]);
    }
    printf("%d\n", kSelection_QS(a, n, k));
    free(a);
    return 0;
}
```