qsort.md 2021/12/26

快排求第k大

```
int kth(int k[], int 1, int r,int th)
{
    int i, last;
    if (1 < r) {
        last = 1;
        for (i = 1 + 1; i <= r; i++)
            if (k[i] < k[1])
            {
                last++;
                swap(k[last],k[i])
            }
        swap(k[last],k[l])
        if(last == th) return k[last];
        else if(last>th) return kth(k, l, last - 1,th);
        else return kth(k, last + 1, r,th);
    return k[1];
}
```