## Kth element in Matrix

## 找到矩阵中第k小的元素

## 采用大根堆

```
#include <bits/stdc++.h>
using namespace std;
int kthSmallest(vector<vector<int>> &matrix, int &n, int &k) {
    priority_queue<int, vector<int>, greater<>> q;
   for (int i = 0; i < n; ++i) {
       for (int j = 0; j < n; ++j) {
            q.push(matrix[i][j]);
   while (k != 1) {
       q.pop();
       k--;
    return q.top();
}
int main() {
   vector<vector<int>> matrix = {{16, 28, 60, 64},
                                 {22, 41, 63, 91},
                                  {27, 50, 87, 93},
                                  {36, 78, 87, 94}};
   int n = 4, k = 3;
   printf("%d\n", kthSmallest(matrix, n, k));
}
```

Kth element in Matrix 1