```cpp
#include <bits/stdc++.h>

using namespace std;

typedef pair<int, int> PAIR;

int main() {

    int k;
    cin>>k;

    vector<vector<int>> allvalues(k);

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

        int size;
        cin>>size;

        allvalues[i]= vector<int>(size);

        for (int k=0; k<size; k++){
            cin>> allvalues[i][k];
        }
    }

    vector<int>indexTraker(k,0);
    priority_queue<PAIR ,vector<PAIR> ,greater<PAIR>>PQ;

    for ( int i=0; i<k; i++){
      PQ.push(make_pair(allvalues[i][0],indexTraker[i]));
    }

    vector<int>ans;
    while (!PQ.empty())
    {
      PAIR x= PQ.top();
      PQ.pop();

      ans.push_back(x.first);
```

```cpp
        if (indexTraker[x.second]+1<allvalues[x.second].size()){

PQ.push(make_pair(allvalues[x.second][indexTraker[x.second]+1],x.second));
        }
        indexTraker[x.second] += 1;

    }

    for (auto element:ans){
      cout<<element<<" "<<endl;
    }


    return 0;
}

/*

3
3
1 4 7
2
3 5
3
2 6 7

*/
```