**S.Tejeswar (22AD104, AI & DS)**

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1. **Kth Smallest Element:**

**C++ Program:**

class Solution {

public:

// arr : given array

// k : find kth smallest element and return using this function

int kthSmallest(vector<int> &arr, int k) {

int arrLen = arr.size();

vector<int> tempArray(\*max\_element(arr.begin(), arr.end()) + 1);

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

tempArray[arr[i]] ++;

}

int i = 0;

while(k > 0){

if(tempArray[i] >= 1){

k -= 1;

}

i ++;

}

return i - 1;

}

};

Time Complexity: O(N)

Space Complexity: O(1)