/\*\*

\* Definition for a binary tree node.

\* struct TreeNode {

\* int val;

\* struct TreeNode \*left;

\* struct TreeNode \*right;

\* };

\*/

int \*head=NULL;

int compare (const void \* a, const void \* b)

{

return ( \*(int\*)a - \*(int\*)b );

}

void findLastN(struct TreeNode\* root, int k,int \*count){

if( (\*count) == 0){

(\*count)++;

}else if( root != NULL ){

//printf("root=%d count=%d\n",root->val,\*count);

//head = realloc(head,sizeof(int)\*((\*count)+1));

head[\*count]=root->val;

(\*count)++;

}else{

return;

}

findLastN(root->left ,k,count);

findLastN(root->right,k,count);

}

int kthSmallest(struct TreeNode\* root, int k){

int ans;

int count=0;

head = realloc(head,sizeof(int)\*10000);//建立所有可以容納的arry[]

head[count]=root->val;//放入第一個值

findLastN(root,k,&count);//將所有root放入head中

qsort(head,count,sizeof(int),compare);//用qsort排列

return head[k-1];

}