public static int sumpairs(Integer[] input , int k){

static int input[] = new int[]{1, 5, 2,4,3};

HashMap <Integer,Integer> map = new HashMap<>();

int count=0;

for(int i =0; i<input.length; i++){

int complement= k-input[i];

int value=input[i];

if(map.ContainsKey(complement)){

int freq = map.get(complement)-1;

count++;

} if (freq==0){

map.remove(complement);

}else {

map.put(complement, freq);

}

else {

if(map.ContainsKey(value)){

map.put(value,map.get(value)+1);

} else {

map.put(value,1);

}

}

}

return count;

}

public static void main(String[] args) {

System.out.print("Total pairs " + sumpairs(input , 6));

}