//BRUT\_FORCE\_APPROACH-

#include <iostream>

using namespace std;

int main()

{

int n;

cout<<"enter n = ";

cin>>n;

cout<<"enter array = ";

int a[n];

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

cin>>a[i];

}

int k;

cout<<"enter sum = ";

cin>>k;

for(int i=0; i<n-1; i++){

for(int j=i+1; j<n; j++){

if(a[i]+a[j] == k){

cout<<a[i]<<','<<a[j]<<" ";

}

}

}

return 0;

}

//OPTIMAL APPROACH (FOR SORTED ARRAY)-

#include <iostream>

using namespace std;

int main()

{

int n;

cout<<"enter n = ";

cin>>n;

cout<<"enter array = ";

int a[n];

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

cin>>a[i];

}

int k;

cout<<"enter sum = ";

cin>>k;

int i=0;

int j=sizeof(a)/sizeof(int)-1;

while(i<j){

int cs=a[i]+a[j];

if(cs>k){

j--;

}else if(cs<k){

i++;

}else{

cout<<a[i]<<','<<a[j]<<" ";

i++;

j--;

}

}

return 0;

}