import java.io.\*;

import java.util.\*;

class Main {

public static void main(String[] args) {

int siz,sum;

Scanner s=new Scanner(System.in);

System.out.println("Enter the size of the array");

siz=s.nextInt();

int arr[]=new int[siz];

getElements(arr,siz,s);

// System.out.println(Arrays.toString(arr));

System.out.println("Enter the sum data");

sum=s.nextInt();

printPairs(arr,sum);

}

static void getElements(int a[],int size,Scanner s1){

//have the logic for accepting input numbers

// Scanner s1=new Scanner(System.in);

System.out.println("Enter "+size+" elements");

for(int i=0;i<size;i++)

{

a[i]=s1.nextInt();

}

}

static void printPairs(int a[],int s){

//have the logic for printing pair information

System.out.println("Integer pairs whose sum is equal to value "+s+"are");

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

{

for (int j = i+1;j < a.length;j++)

{

if (a[i] + a[j] == s)

System.out.println("(" + a[i] + ", " + a[j] + ")");

}

}

}

}