

Practical Exercise:

Given N integers ($0 < N < 10000$), please find a set of integer such that the sum of them is divided by N .

The absolute value of each integer is smaller than 10000.

Sample:

```
Input:
5
Input 5 numbers:
4 6 7 8 10
Output:
4+6=10 is divisible by 5
```

```
Input:
4
Input 4 numbers:
7 11 3 6
Output:
3+6+11=20 is divisible by 4
```

```
Input:
3
Input 5 numbers:
2 2 2
Output:
2+2+2=6 is divisible by 3.
```

```
{ $M 1024,0 }
var a,b:array[1..10000] of integer;
    cnt:array[1..10000] of byte;
    sum,n,i,j,k:integer;
    done:boolean;
begin
readln(n); sum:=0; done:=false;
fillchar(a,sizeof(a),0);fillchar(b,sizeof(b),0);
fillchar(cnt,sizeof(cnt),0);
i:=1;
while (i<=n) and not done do
begin
read(a[i]);
inc(sum,a[i]);
b[i]:=sum mod n;
inc(cnt[b[i]]);
if (b[i]=0) then
begin
for j:=1 to i-1 do write(a[j],'+');
writeln(a[i],'=',sum,' is divisible by ',n);
done:=true;
end else if cnt[b[i]]>=2 then
begin
k:=1; while (k<i) and (b[k]<>b[i]) do inc(k);
sum:=0;
for j:=k to i do
begin
write(a[j],'+');
inc(sum,a[j]);
end;
writeln(a[i],'=',sum,' is divisible by ',n);
done:=true;
end;
inc(i);
end;end.
```