# **QUESTION:**

There is a battle between heroes and villains going on. You have M heroes, all of them have the same health H. There are N villains, health of the i-th villain is Vi. When a hero, with health H battles a villain with health Vi, one of the three scenarios can happen:

if H > Vi: The villain is defeated, and the health of the hero is decreased by Vi if H < Vi: The villain wins, his health is not affected, and the hero is no longer able to fight. if H = Vi: Both are considered defeated, and neither can fight. The heroes start fighting villains one by one in the same order, first villain 1 then villain 2 and so on. It might be possible that before defeating all the villains, all the heroes are defeated. Therefore, to ensure the victory of the heroes, you want to remove some villains from the front.

Your task is to find the minimum number of villains you need to remove from the front such that the victory of the heroes is guaranteed.

Note: If in the last battle, both the hero and villain are defeated and no more heroes or villains remain, it would still be considered a victory since all the villains are defeated.

**Parameters:**

N :: INTEGER The first line contains an integer, N, denoting the number of villains N :: 1 -> 2\*10^5

M :: INTEGER The next line contains an integer, M, denoting the number of heroes M :: 1 -> 2\*10^5

H :: INTEGER The next line contains an integer, H, denoting the health of each of the heroes H :: 1 -> 10^9

array :: INTEGER ARRAY Each line i of the N subsequent lines (where 0 ≤ i < N) contains an integer describing the health of each of the villains. array[i] :: 1 -> 10^9

**Test Cases**

Case#: 1

Input: 4 4 3 3 1 3 3

Output: 0

[3, 1, 3, 3]. We have 4 heroes will health 3. The heroes 1 will fight villain 1. Both get defeated. The hero 2 fights villain 2. It wins the battle and now his health is 2. He fights the third villain and loses, the villain still has health 3. The hero 3 fights villain 3 and both get defeated. Hero 4 fights villain 4 and both get defeated. So, no need to remove any villain.

Case#: 2

Input: 5 3 3 1 2 3 1 1

Output: 0

The fight will take place and hero 1 will defeat villain 1 and 2. Hero 2 will defeat villain 2. Hero 3 will defeat villain 3 and 4

Case#: 3

Input: 5 1 4 1 2 3 1 3

Output: 3

Only 1 hero is present with health 4. Since you can only remove villain from the front, you will have to remove the first 3 villains to ensure victory. The hero can fight the last 2 villain of health 1 and 3 respectively and win the battle.

**Answer:**

import java.util.\*;

public class hero\_villian

{

public static void main(String args[])

{

int h,v,hh,svh=0,sum=0,shh=0;

Scanner sc=new Scanner(System.in);

v=sc.nextInt();

h=sc.nextInt();

hh=sc.nextInt();

int vh[]=new int[v];

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

{

vh[i]=sc.nextInt();

}

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

{

svh=svh+vh[i];

}

//System.out.println(svh);

shh=hh\*h;

if(shh>svh)

{

System.out.println("0");

}

if(shh<svh)

{

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

{

sum=sum+vh[i];

if(sum==shh)

{

System.out.println(v-i-1);

break;

}

if(sum>shh)

{

System.out.println(v-i);

break;

}

if(sum<shh)

{

continue;

}

}

}

}

}