#include<stdio.h>

int main(){

int incoming, outgoing, buck\_size, n, store = 0;

printf("Enter bucket size, outgoing rate and no of inputs : ");

scanf("%d %d %d", &buck\_size, &outgoing, &n);

while (n != 0) {

printf("Enter the incoming packet size : ");

scanf("%d", &incoming);

printf("Incoming packet size %d\n", incoming);

if (incoming <= (buck\_size - store)){

store += incoming;

printf("Bucket buffer size : %d out of %d\n", store, buck\_size);

} else {

printf("Dropped %d no of packets\n", incoming - (buck\_size - store));

store = buck\_size;

printf("Bucket buffer size : %d out of %d\n", store, buck\_size);

}

if(store>=outgoing){

store=outgoing-store;

}

if(store<0){

store=store\*(-1);

}

printf("After outgoing , There are %d out of %d packets left in buffer\n", store, buck\_size);

n--;

}

}